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PTO-1590 (9-90)

USCOMM-DC 00-2052

STIC-Biotech/ChemLib 87941

From: Schultz, James
Sent: Monday, March 03, 2003 11:08 AM
To: STIC-Biotech/ChemLib
Subject: sequence search request for 10/001,844

Hello,

I need a length limited nucleotide sequence search performed on SEQ ID NO:3 (1576 nt long) in the above entitled case, where the maximum size of the returned hit is no longer than 50 nucleotides.
Thank you very much,
Doug Schultz

J. Douglas Schultz, Ph.D
AU 1635 (Biotechnology)
Patent Examiner
United States Patent and Trademark Office
(703) 308-9355
(703) 746-3973 (fax)
Office: CM1 12E18
Mail: CM1 11E12

Point of Contact:
Beverly Shears
Technical Info. Specialist
CM1 1E05 Tel: 308-4994

Searcher:_____
Phone:_____
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Date Picked Up:_____
Date Completed:_____
Searcher Prep/Review:_____
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TYPE OF SEARCH:
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AA Sequences:_____
Structures:_____
Bibliographic:_____
Litigation:_____
Full text:_____
Patent Family:_____
Other:_____

VENDOR/COST (where applic.)
STN:_____
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Schultz, J.
10/001844
Seq. ID 3 w/ Interf

GenCore version 5.1.4_p5_4578

OM nucleic - nucleic search, using sw model

Run on: March 13, 2003, 21:54:09 ; Search time 3749 Seconds
(without alignments)
10569.368 Million cell updates/sec

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Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 24791104 seqs, 12571243825 residues

Total number of hits satisfying chosen parameters: 12114646

Minimum DB seq length: 0
Maximum DB seq length: 50

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 1000 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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c	142	21.6	1.4	48	18	US-09-401-645-665	Sequence 665, App
c	143	21.6	1.4	50	17	US-09-306-333A-122	Sequence 122, App
	144	21.4	1.4	43	16	US-09-213-620B-4038	Sequence 4038, Ap
	145	21.4	1.4	43	16	US-09-213-620C-4038	Sequence 4038, Ap
	146	21.4	1.4	43	17	US-09-388-906A-8830	Sequence 8830, Ap
	147	21.4	1.4	44	7	US-08-369-832-344	Sequence 344, App
	148	21.4	1.4	45	35	US-09-946-374-151	Sequence 151, App
	149	21.4	1.4	45	38	US-10-006-041A-151	Sequence 151, App
	150	21.4	1.4	45	38	US-10-006-063A-151	Sequence 151, App
	151	21.4	1.4	45	38	US-10-006-116A-151	Sequence 151, App
	152	21.4	1.4	45	38	US-10-006-117A-151	Sequence 151, App
	153	21.4	1.4	45	38	US-10-006-130A-151	Sequence 151, App
	154	21.4	1.4	45	38	US-10-006-172A-151	Sequence 151, App
	155	21.4	1.4	45	38	US-10-006-485A-151	Sequence 151, App
	156	21.4	1.4	45	38	US-10-006-746A-151	Sequence 151, App
	157	21.4	1.4	45	38	US-10-006-768A-151	Sequence 151, App
	158	21.4	1.4	45	38	US-10-006-818A-151	Sequence 151, App
	159	21.4	1.4	45	38	US-10-006-856A-151	Sequence 151, App
	160	21.4	1.4	45	38	US-10-007-194A-151	Sequence 151, App
	161	21.4	1.4	45	38	US-10-007-236A-151	Sequence 151, App
	162	21.4	1.4	45	38	US-10-011-671A-151	Sequence 151, App
	163	21.4	1.4	45	38	US-10-011-692A-151	Sequence 151, App
	164	21.4	1.4	45	38	US-10-011-795A-151	Sequence 151, App
	165	21.4	1.4	45	38	US-10-011-795B-151	Sequence 151, App
	166	21.4	1.4	45	38	US-10-011-833A-151	Sequence 151, App
	167	21.4	1.4	45	38	US-10-012-064A-151	Sequence 151, App

	168	21.4	1.4	45	38	US-10-012-101B-151	Sequence 151, App
	169	21.4	1.4	45	38	US-10-012-121A-151	Sequence 151, App
	170	21.4	1.4	45	38	US-10-012-137A-151	Sequence 151, App
	171	21.4	1.4	45	38	US-10-012-149A-151	Sequence 151, App
	172	21.4	1.4	45	38	US-10-012-231A-151	Sequence 151, App
	173	21.4	1.4	45	38	US-10-012-237A-151	Sequence 151, App
	174	21.4	1.4	45	38	US-10-012-752A-151	Sequence 151, App
	175	21.4	1.4	45	38	US-10-012-753A-151	Sequence 151, App
	176	21.4	1.4	45	38	US-10-012-754A-151	Sequence 151, App
	177	21.4	1.4	45	38	US-10-012-755A-151	Sequence 151, App
	178	21.4	1.4	45	38	US-10-013-430A-151	Sequence 151, App
	179	21.4	1.4	45	38	US-10-013-906A-151	Sequence 151, App
	180	21.4	1.4	45	38	US-10-013-907A-151	Sequence 151, App
	181	21.4	1.4	45	38	US-10-013-909A-151	Sequence 151, App
	182	21.4	1.4	45	38	US-10-013-910A-151	Sequence 151, App
	183	21.4	1.4	45	38	US-10-013-911A-151	Sequence 151, App
	184	21.4	1.4	45	38	US-10-013-913A-151	Sequence 151, App
	185	21.4	1.4	45	38	US-10-013-915A-151	Sequence 151, App
	186	21.4	1.4	45	38	US-10-015-385A-151	Sequence 151, App
	187	21.4	1.4	45	38	US-10-015-386A-151	Sequence 151, App
	188	21.4	1.4	45	38	US-10-015-387A-151	Sequence 151, App
	189	21.4	1.4	45	38	US-10-015-388A-151	Sequence 151, App
	190	21.4	1.4	45	38	US-10-015-389A-151	Sequence 151, App
	191	21.4	1.4	45	38	US-10-015-390A-151	Sequence 151, App
	192	21.4	1.4	45	38	US-10-015-391A-151	Sequence 151, App
	193	21.4	1.4	45	38	US-10-015-393A-151	Sequence 151, App
	194	21.4	1.4	45	38	US-10-015-395A-151	Sequence 151, App
	195	21.4	1.4	45	38	US-10-015-480A-151	Sequence 151, App
	196	21.4	1.4	45	38	US-10-015-499A-151	Sequence 151, App
	197	21.4	1.4	45	38	US-10-015-519A-151	Sequence 151, App
	198	21.4	1.4	45	38	US-10-015-653A-151	Sequence 151, App
	199	21.4	1.4	45	38	US-10-015-671A-151	Sequence 151, App
	200	21.4	1.4	45	38	US-10-015-715A-151	Sequence 151, App
	201	21.4	1.4	45	38	US-10-015-822A-151	Sequence 151, App
	202	21.4	1.4	45	38	US-10-015-869A-151	Sequence 151, App
	203	21.4	1.4	45	38	US-10-017-306A-151	Sequence 151, App
	204	21.4	1.4	45	38	US-10-017-390A-151	Sequence 151, App
	205	21.4	1.4	45	38	US-10-017-407A-151	Sequence 151, App
	206	21.4	1.4	45	38	US-10-017-527A-151	Sequence 151, App
	207	21.4	1.4	45	38	US-10-017-610A-151	Sequence 151, App
	208	21.4	1.4	45	38	US-10-017-867A-151	Sequence 151, App
	209	21.4	1.4	45	38	US-10-020-063A-151	Sequence 151, App
c	210	21.4	1.4	47	1	PCT-US02-25943-54721	Sequence 54721, A
c	211	21.4	1.4	47	42	US-10-227-565-54721	Sequence 54721, A
	212	21.4	1.4	50	8	US-08-401-881A-889	Sequence 889, App
	213	21.4	1.4	50	8	US-08-401-881B-889	Sequence 889, App
	214	21.4	1.4	50	11	US-08-798-074-461	Sequence 461, App
	215	21.4	1.4	50	11	US-08-798-074-1485	Sequence 1485, Ap
	216	21.4	1.4	50	11	US-08-798-074B-461	Sequence 461, App
	217	21.4	1.4	50	11	US-08-798-074B-1485	Sequence 1485, Ap
	218	21.4	1.4	50	18	US-09-442-849B-640	Sequence 640, App
	219	21.4	1.4	50	18	US-09-443-199C-640	Sequence 640, App
	220	21.4	1.4	50	28	US-09-702-690-4	Sequence 4, Appli
c	221	21.4	1.4	50	29	US-09-755-374A-6512	Sequence 6512, Ap
	222	21.4	1.4	50	30	US-09-782-161-889	Sequence 889, App
	223	21.4	1.4	50	34	US-09-912-292-23514	Sequence 23514, A
	224	21.4	1.4	50	34	US-09-912-293-18701	Sequence 18701, A
	225	21.2	1.3	41	18	US-09-404-520-39161	Sequence 39161, A
	226	21.2	1.3	42	23	US-09-606-776-934	Sequence 934, App
	227	21.2	1.3	44	8	US-08-472-801-951	Sequence 951, App
	228	21.2	1.3	44	10	US-08-668-235-952	Sequence 952, App
	229	21.2	1.3	44	65	US-60-213-359-4527	Sequence 4527, Ap
	230	21.2	1.3	44	76	US-60-324-185-14828	Sequence 14828, A
c	231	21.2	1.3	45	17	US-09-306-333A-28	Sequence 28, Appl
	232	21.2	1.3	47	1	PCT-US02-25943-59274	Sequence 59274, A
	233	21.2	1.3	47	42	US-10-227-565-59274	Sequence 59274, A
	234	21.2	1.3	49	23	US-09-605-700-2406	Sequence 2406, Ap
c	235	21.2	1.3	50	5	US-08-196-362A-5685	Sequence 5685, Ap
c	236	21.2	1.3	50	5	US-08-196-362D-5685	Sequence 5685, Ap
c	237	21.2	1.3	50	5	US-08-196-362E-5685	Sequence 5685, Ap
c	238	21.2	1.3	50	5	US-08-196-362F-5685	Sequence 5685, Ap
c	239	21.2	1.3	50	5	US-08-196-362G-5685	Sequence 5685, Ap
c	240	21.2	1.3	50	17	US-09-306-333A-27	Sequence 27, Appl

c	241	21.2	1.3	50	29	US-09-755-374A-2450	Sequence 2450, Ap
c	242	21	1.3	39	1	PCT-US02-25943-35825	Sequence 35825, A
c	243	21	1.3	39	42	US-10-227-565-35825	Sequence 35825, A
c	244	21	1.3	47	1	PCT-US02-25943-62619	Sequence 62619, A
	245	21	1.3	47	29	US-09-724-866-9247	Sequence 9247, Ap
	246	21	1.3	47	29	US-09-724-866A-9247	Sequence 9247, Ap
	247	21	1.3	47	41	US-10-170-097-935	Sequence 935, App
	248	21	1.3	47	41	US-10-170-097-1096	Sequence 1096, Ap
c	249	21	1.3	47	42	US-10-227-565-62619	Sequence 62619, A
	250	21	1.3	47	61	US-60-171-432-9247	Sequence 9247, Ap
	251	21	1.3	50	1	PCT-US02-25943-35824	Sequence 35824, A
c	252	21	1.3	50	8	US-08-475-228-374	Sequence 374, App
c	253	21	1.3	50	8	US-08-482-080-374	Sequence 374, App
c	254	21	1.3	50	11	US-08-781-986A-2153	Sequence 2153, Ap
c	255	21	1.3	50	13	US-08-956-171-2153	Sequence 2153, Ap
c	256	21	1.3	50	13	US-08-956-171B-2153	Sequence 2153, Ap
c	257	21	1.3	50	13	US-08-956-171C-2153	Sequence 2153, Ap
c	258	21	1.3	50	13	US-08-956-171E-2153	Sequence 2153, Ap
c	259	21	1.3	50	29	US-09-755-374A-876	Sequence 876, App
	260	21	1.3	50	29	US-09-755-374A-14682	Sequence 14682, A
	261	21	1.3	50	29	US-09-755-374A-19358	Sequence 19358, A
c	262	21	1.3	50	29	US-09-755-374A-27994	Sequence 27994, A
c	263	21	1.3	50	37	US-09-993-346-374	Sequence 374, App
	264	21	1.3	50	42	US-10-227-565-35824	Sequence 35824, A
c	265	20.8	1.3	38	1	PCT-US02-25943-14120	Sequence 14120, A
c	266	20.8	1.3	38	42	US-10-227-565-14120	Sequence 14120, A
c	267	20.8	1.3	40	1	PCT-US02-25940-7237	Sequence 7237, Ap
c	268	20.8	1.3	40	17	US-09-306-333A-29	Sequence 29, Appl
c	269	20.8	1.3	40	42	US-10-227-563-7237	Sequence 7237, Ap
	270	20.8	1.3	43	18	US-09-445-375A-24	Sequence 24, Appl
	271	20.8	1.3	43	38	US-10-016-686-6	Sequence 6, Appli
	272	20.8	1.3	43	39	US-10-060-585-12	Sequence 12, Appl
	273	20.8	1.3	43	40	US-10-104-522-24	Sequence 24, Appl
	274	20.8	1.3	45	40	US-10-135-984-6	Sequence 6, Appli
	275	20.8	1.3	46	22	US-09-584-852-2184	Sequence 2184, Ap
	276	20.8	1.3	46	40	US-10-135-984-4	Sequence 4, Appli
c	277	20.8	1.3	46	40	US-10-135-984-5	Sequence 5, Appli
c	278	20.8	1.3	46	40	US-10-135-984-7	Sequence 7, Appli
c	279	20.8	1.3	47	18	US-09-445-375A-8	Sequence 8, Appli
c	280	20.8	1.3	47	38	US-10-016-686-16	Sequence 16, Appl
c	281	20.8	1.3	47	39	US-10-060-585-13	Sequence 13, Appl
c	282	20.8	1.3	47	40	US-10-104-522-8	Sequence 8, Appli
	283	20.8	1.3	47	41	US-10-170-097-934	Sequence 934, App
	284	20.8	1.3	47	65	US-60-216-745-2568	Sequence 2568, Ap
c	285	20.8	1.3	48	8	US-08-478-097-33	Sequence 33, Appl
c	286	20.8	1.3	48	18	US-09-496-398-33	Sequence 33, Appl
c	287	20.8	1.3	49	1	PCT-US02-25943-26757	Sequence 26757, A
c	288	20.8	1.3	49	42	US-10-227-565-26757	Sequence 26757, A
c	289	20.8	1.3	49	69	US-60-252-833-32799	Sequence 32799, A
	290	20.8	1.3	50	29	US-09-755-374A-19830	Sequence 19830, A
c	291	20.8	1.3	50	29	US-09-755-374A-27182	Sequence 27182, A
	292	20.8	1.3	50	29	US-09-755-374A-27977	Sequence 27977, A
	293	20.6	1.3	27	40	US-10-108-969-4	Sequence 4, Appli
	294	20.6	1.3	38	16	US-09-213-620B-1242	Sequence 1242, Ap
	295	20.6	1.3	38	16	US-09-213-620C-1242	Sequence 1242, Ap
	296	20.6	1.3	38	18	US-09-411-999-364	Sequence 364, App
	297	20.6	1.3	39	21	US-09-548-954A-1120	Sequence 1120, Ap
	298	20.6	1.3	39	21	US-09-548-954B-1120	Sequence 1120, Ap
c	299	20.6	1.3	40	1	PCT-US02-25940-20998	Sequence 20998, A
c	300	20.6	1.3	40	42	US-10-227-563-20998	Sequence 20998, A
	301	20.6	1.3	41	1	PCT-US02-12063-251	Sequence 251, App
	302	20.6	1.3	41	40	US-10-126-022-251	Sequence 251, App
	303	20.6	1.3	45	4	US-08-086-411-1	Sequence 1, Appli
c	304	20.6	1.3	45	38	US-10-014-282-22	Sequence 22, Appl
c	305	20.6	1.3	47	1	PCT-US02-25943-48985	Sequence 48985, A
c	306	20.6	1.3	47	42	US-10-227-565-48985	Sequence 48985, A
	307	20.6	1.3	50	11	US-08-790-774-9334	Sequence 9334, Ap
c	308	20.6	1.3	50	11	US-08-798-074-4266	Sequence 4266, Ap
c	309	20.6	1.3	50	11	US-08-798-074B-4266	Sequence 4266, Ap
c	310	20.6	1.3	50	29	US-09-726-173A-1202	Sequence 1202, Ap
	311	20.6	1.3	50	29	US-09-755-374A-12538	Sequence 12538, A
	312	20.4	1.3	30	7	US-08-301-013-17	Sequence 17, Appl
c	313	20.4	1.3	30	26	US-09-669-187A-1096	Sequence 1096, Ap

c 314	20.4	1.3	30	40	US-10-144-360-4	Sequence 4, Appli
c 315	20.4	1.3	32	1	PCT-US02-25940-4004	Sequence 4004, Ap
c 316	20.4	1.3	32	40	US-10-144-360-5	Sequence 5, Appli
c 317	20.4	1.3	32	42	US-10-227-563-4004	Sequence 4004, Ap
c 318	20.4	1.3	34	40	US-10-144-360-6	Sequence 6, Appli
c 319	20.4	1.3	35	26	US-09-669-187A-771	Sequence 771, App
c 320	20.4	1.3	35	30	US-09-776-479-771	Sequence 771, App
c 321	20.4	1.3	35	33	US-09-888-326-172	Sequence 172, App
c 322	20.4	1.3	35	38	US-10-017-995-771	Sequence 771, App
c 323	20.4	1.3	35	40	US-10-112-653-744	Sequence 744, App
324	20.4	1.3	36	5	US-08-131-104-3	Sequence 3, Appli
c 325	20.4	1.3	36	40	US-10-144-360-7	Sequence 7, Appli
c 326	20.4	1.3	38	40	US-10-144-360-8	Sequence 8, Appli
c 327	20.4	1.3	39	1	PCT-US02-25943-47774	Sequence 47774, A
c 328	20.4	1.3	39	42	US-10-227-565-47774	Sequence 47774, A
c 329	20.4	1.3	40	1	PCT-US97-19596-37	Sequence 37, Appl
c 330	20.4	1.3	40	1	PCT-US97-19596A-37	Sequence 37, Appl
c 331	20.4	1.3	40	3	US-07-969-192A-1	Sequence 1, Appli
c 332	20.4	1.3	40	13	US-08-962-012-37	Sequence 37, Appl
c 333	20.4	1.3	40	40	US-10-144-360-9	Sequence 9, Appli
334	20.4	1.3	41	1	PCT-US02-25940-14922	Sequence 14922, A
335	20.4	1.3	41	4	US-08-084-033A-14	Sequence 14, Appl
336	20.4	1.3	41	13	US-08-930-589-14	Sequence 14, Appl
337	20.4	1.3	41	18	US-09-404-520-31285	Sequence 31285, A
338	20.4	1.3	41	38	US-10-027-961A-14	Sequence 14, Appl
c 339	20.4	1.3	41	40	US-10-144-360-20	Sequence 20, Appl
340	20.4	1.3	41	42	US-10-227-563-14922	Sequence 14922, A
c 341	20.4	1.3	42	39	US-10-061-071-76	Sequence 76, Appl
342	20.4	1.3	44	5	US-08-131-104-2	Sequence 2, Appli
c 343	20.4	1.3	45	1	PCT-US02-25940-12335	Sequence 12335, A
c 344	20.4	1.3	45	42	US-10-227-563-12335	Sequence 12335, A
c 345	20.4	1.3	46	1	PCT-US02-25943-40405	Sequence 40405, A
c 346	20.4	1.3	46	42	US-10-227-565-40405	Sequence 40405, A
c 347	20.4	1.3	47	6	US-08-233-596A-7	Sequence 7, Appli
348	20.4	1.3	48	1	PCT-US02-25940-11618	Sequence 11618, A
349	20.4	1.3	48	42	US-10-227-563-11618	Sequence 11618, A
350	20.4	1.3	49	29	US-09-740-002-9	Sequence 9, Appli
351	20.4	1.3	50	11	US-08-781-986A-5127	Sequence 5127, Ap
352	20.4	1.3	50	13	US-08-956-171-5127	Sequence 5127, Ap
353	20.4	1.3	50	13	US-08-956-171B-5127	Sequence 5127, Ap
354	20.4	1.3	50	13	US-08-956-171C-5127	Sequence 5127, Ap
355	20.4	1.3	50	13	US-08-956-171E-5127	Sequence 5127, Ap
356	20.4	1.3	50	28	US-09-702-690-3	Sequence 3, Appli
c 357	20.4	1.3	50	29	US-09-755-374A-7332	Sequence 7332, Ap
c 358	20.4	1.3	50	29	US-09-755-374A-14160	Sequence 14160, A
c 359	20.4	1.3	50	29	US-09-755-374A-16320	Sequence 16320, A
c 360	20.4	1.3	50	29	US-09-755-374A-27180	Sequence 27180, A
361	20.2	1.3	25	17	US-09-396-196F-67178	Sequence 67178, A
362	20.2	1.3	25	17	US-09-396-196G-67178	Sequence 67178, A
c 363	20.2	1.3	34	1	PCT-US02-25943-19012	Sequence 19012, A
c 364	20.2	1.3	34	1	PCT-US02-25943-39117	Sequence 39117, A
c 365	20.2	1.3	34	42	US-10-227-565-19012	Sequence 19012, A
c 366	20.2	1.3	34	42	US-10-227-565-39117	Sequence 39117, A
367	20.2	1.3	41	18	US-09-404-520-32345	Sequence 32345, A
c 368	20.2	1.3	42	1	PCT-US02-25943-14679	Sequence 14679, A
c 369	20.2	1.3	42	42	US-10-227-565-14679	Sequence 14679, A
370	20.2	1.3	44	69	US-60-253-654-27120	Sequence 27120, A
371	20.2	1.3	44	69	US-60-255-592-27120	Sequence 27120, A
c 372	20.2	1.3	45	1	PCT-US02-25940-22163	Sequence 22163, A
c 373	20.2	1.3	45	42	US-10-227-563-22163	Sequence 22163, A
c 374	20.2	1.3	46	1	PCT-US02-25943-13749	Sequence 13749, A
375	20.2	1.3	46	8	US-08-475-228-85	Sequence 85, Appl
376	20.2	1.3	46	8	US-08-482-080-85	Sequence 85, Appl
377	20.2	1.3	46	16	US-09-230-930B-1	Sequence 1, Appli
c 378	20.2	1.3	46	16	US-09-230-930B-1	Sequence 1, Appli
379	20.2	1.3	46	37	US-09-993-346-85	Sequence 85, Appl
c 380	20.2	1.3	46	42	US-10-227-565-13749	Sequence 13749, A
c 381	20.2	1.3	47	6	US-08-292-686B-48	Sequence 48, Appl
c 382	20.2	1.3	47	10	US-08-601-209A-67	Sequence 67, Appl
c 383	20.2	1.3	48	22	US-09-577-410-6513	Sequence 6513, Ap
384	20.2	1.3	48	38	US-10-016-686-35	Sequence 35, Appl
385	20.2	1.3	48	39	US-10-072-152-32	Sequence 32, Appl
c 386	20.2	1.3	49	1	PCT-US02-25943-1156	Sequence 1156, Ap
c 387	20.2	1.3	49	8	US-08-472-801-1459	Sequence 1459, Ap
c 388	20.2	1.3	49	10	US-08-668-235-1459	Sequence 1459, Ap
c 389	20.2	1.3	49	42	US-10-227-565-1156	Sequence 1156, Ap
c 390	20.2	1.3	50	7	US-08-361-811-107	Sequence 107, App
c 391	20.2	1.3	50	7	US-08-381-478-144	Sequence 144, App
c 392	20.2	1.3	50	9	US-08-535-025-144	Sequence 144, App
c 393	20.2	1.3	50	9	US-08-591-919-144	Sequence 144, App
c 394	20.2	1.3	50	9	US-08-592-007-144	Sequence 144, App
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c 396	20.2	1.3	50	9	US-08-592-131-144	Sequence 144, App
c 397	20.2	1.3	50	13	US-08-964-039-144	Sequence 144, App
c 398	20.2	1.3	50	25	US-09-642-058-242	Sequence 242, App
399	20.2	1.3	50	29	US-09-755-374A-8544	Sequence 8544, Ap
400	20.2	1.3	50	29	US-09-755-374A-26916	Sequence 26916, A
c 401	20.2	1.3	50	32	US-09-846-038-821	Sequence 821, App
402	20	1.3	30	1	PCT-US02-25943-15189	Sequence 15189, A
403	20	1.3	30	42	US-10-227-565-15189	Sequence 15189, A
c 404	20	1.3	32	14	US-09-063-778-31	Sequence 31, Appl
c 405	20	1.3	32	23	US-09-617-545-31	Sequence 31, Appl
c 406	20	1.3	32	40	US-10-147-463-31	Sequence 31, Appl
407	20	1.3	36	1	PCT-US02-25940-8624	Sequence 8624, Ap
408	20	1.3	36	42	US-10-227-563-8624	Sequence 8624, Ap
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419	20	1.3	45	32	US-09-857-723-202	Sequence 202, App
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421	20	1.3	45	37	US-09-989-279-122	Sequence 122, App
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c	523	19.8	1.3	33	10	US-08-668-235-389
	524	19.8	1.3	39	1	PCT-US02-25943-33117
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	571	19.6	1.2	41	18	US-09-404-520-30544
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	587	19.6	1.2	46	30	US-09-763-037-8
	588	19.6	1.2	47	1	PCT-US02-25943-30505
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	592	19.6	1.2	49	28	US-09-704-424-22217
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	594	19.6	1.2	50	1	PCT-US02-25943-11895
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	596	19.6	1.2	50	6	US-08-220-661A-57
	597	19.6	1.2	50	6	US-08-220-661B-57
	598	19.6	1.2	50	6	US-08-220-662-57
	599	19.6	1.2	50	11	US-08-798-074-495
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c	601	19.6	1.2	50	14	US-09-073-079-712
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c	603	19.6	1.2	50	29	US-09-755-374A-8092
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c 610	19.6	1.2	50	40	US-10-131-827-181	Sequence 181, App
c 611	19.6	1.2	50	40	US-10-131-831-181	Sequence 181, App
612	19.6	1.2	50	42	US-10-227-565-11895	Sequence 11895, A
c 613	19.6	1.2	50	48	US-60-047-802-712	Sequence 712, App
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c 616	19.4	1.2	25	17	US-09-396-196G-62925	Sequence 62925, A
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618	19.4	1.2	29	1	PCT-US02-25943-28563	Sequence 28563, A
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626	19.4	1.2	31	1	PCT-US02-25943-30422	Sequence 30422, A
627	19.4	1.2	31	42	US-10-227-565-30422	Sequence 30422, A
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629	19.4	1.2	38	77	US-60-334-904-185	Sequence 185, App
630	19.4	1.2	39	28	US-09-704-424-33212	Sequence 33212, A
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c 632	19.4	1.2	40	10	US-08-668-235-511	Sequence 511, App
c 633	19.4	1.2	42	1	PCT-US02-25943-43897	Sequence 43897, A
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636	19.4	1.2	43	1	PCT-US02-25943-413	Sequence 413, App
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Sequence 25020, A
Sequence 26021, A
Sequence 42513, A
Sequence 32799, A
Sequence 4902, Ap
Sequence 32194, A
Sequence 458, App
Sequence 5790, Ap
Sequence 5792, Ap
Sequence 8054, Ap
Sequence 9948, Ap
Sequence 10086, A
Sequence 14161, A
Sequence 17060, A
Sequence 17088, A
Sequence 21930, A
Sequence 21932, A
Sequence 21932, A
Sequence 16, Appl
Sequence 4902, Ap
Sequence 4902, Ap
Sequence 32194, A
Sequence 18092, A
Sequence 18092, A
Sequence 5047, Ap
Sequence 5047, Ap
Sequence 6, Appli
Sequence 6, Appli
Sequence 1963, Ap
Sequence 54033, A
Sequence 1963, Ap
Sequence 54033, A
Sequence 120, App
Sequence 121, App
Sequence 120, App
Sequence 121, App
Sequence 61669, A
Sequence 1557, Ap

c 898	18.8	1.2	36	10	US-08-668-235-1557	Sequence 1557, Ap
899	18.8	1.2	36	42	US-10-227-565-61669	Sequence 61669, A
c 900	18.8	1.2	38	1	PCT-US02-25943-18344	Sequence 18344, A
c 901	18.8	1.2	38	42	US-10-227-565-18344	Sequence 18344, A
c 902	18.8	1.2	39	1	PCT-US00-20538-4	Sequence 4, Appli
c 903	18.8	1.2	39	1	PCT-US02-25943-1528	Sequence 1528, Ap
c 904	18.8	1.2	39	38	US-10-048-502-4	Sequence 4, Appli
c 905	18.8	1.2	39	40	US-10-100-679-8	Sequence 8, Appli
c 906	18.8	1.2	39	42	US-10-227-565-1528	Sequence 1528, Ap
907	18.8	1.2	40	1	PCT-US02-25943-2589	Sequence 2589, Ap
c 908	18.8	1.2	40	8	US-08-472-801-14	Sequence 14, Appl
c 909	18.8	1.2	40	10	US-08-668-235-14	Sequence 14, Appl
910	18.8	1.2	40	17	US-09-324-672A-390	Sequence 390, App
c 911	18.8	1.2	40	32	US-09-833-203-17	Sequence 17, Appl
912	18.8	1.2	40	42	US-10-227-565-2589	Sequence 2589, Ap
c 913	18.8	1.2	41	1	PCT-US02-25940-17878	Sequence 17878, A
c 914	18.8	1.2	41	1	PCT-US02-25940-19413	Sequence 19413, A
915	18.8	1.2	41	6	US-08-222-255-1	Sequence 1, Appli
916	18.8	1.2	41	6	US-08-222-255-5	Sequence 5, Appli
917	18.8	1.2	41	8	US-08-411-622-25	Sequence 25, Appl
918	18.8	1.2	41	11	US-08-781-168-1	Sequence 1, Appli
919	18.8	1.2	41	11	US-08-781-168-5	Sequence 5, Appli
920	18.8	1.2	41	12	US-08-896-535-25	Sequence 25, Appl
921	18.8	1.2	41	15	US-09-130-394-1	Sequence 1, Appli
922	18.8	1.2	41	15	US-09-130-394-5	Sequence 5, Appli
c 923	18.8	1.2	41	18	US-09-404-520-29130	Sequence 29130, A
c 924	18.8	1.2	41	18	US-09-404-520-30886	Sequence 30886, A
925	18.8	1.2	41	18	US-09-404-520-32389	Sequence 32389, A
c 926	18.8	1.2	41	18	US-09-404-520-34360	Sequence 34360, A
927	18.8	1.2	41	18	US-09-404-520-42141	Sequence 42141, A
c 928	18.8	1.2	41	42	US-10-227-563-17878	Sequence 17878, A
c 929	18.8	1.2	41	42	US-10-227-563-19413	Sequence 19413, A
c 930	18.8	1.2	41	79	US-60-353-790-196	Sequence 196, App
931	18.8	1.2	42	1	PCT-US02-25943-9242	Sequence 9242, Ap
c 932	18.8	1.2	42	1	PCT-US02-25943-56064	Sequence 56064, A
c 933	18.8	1.2	42	7	US-08-300-726A-43	Sequence 43, Appl
c 934	18.8	1.2	42	29	US-09-747-377-486	Sequence 486, App
935	18.8	1.2	42	32	US-09-833-203-8	Sequence 8, Appli
c 936	18.8	1.2	42	32	US-09-833-203-9	Sequence 9, Appli
c 937	18.8	1.2	42	38	US-10-035-832-946	Sequence 946, App
c 938	18.8	1.2	42	40	US-10-105-613-486	Sequence 486, App
939	18.8	1.2	42	40	US-10-121-258-65	Sequence 65, Appl
940	18.8	1.2	42	42	US-10-227-565-9242	Sequence 9242, Ap
c 941	18.8	1.2	42	42	US-10-227-565-56064	Sequence 56064, A
942	18.8	1.2	43	1	PCT-US02-25940-11913	Sequence 11913, A
943	18.8	1.2	43	1	PCT-US02-25943-17427	Sequence 17427, A
944	18.8	1.2	43	8	US-08-463-519-7	Sequence 7, Appli
945	18.8	1.2	43	28	US-09-701-001B-55	Sequence 55, Appl
946	18.8	1.2	43	42	US-10-227-563-11913	Sequence 11913, A
947	18.8	1.2	43	42	US-10-227-565-17427	Sequence 17427, A
948	18.8	1.2	44	1	PCT-US02-25943-23722	Sequence 23722, A
949	18.8	1.2	44	3	US-07-852-154A-10	Sequence 10, Appl
950	18.8	1.2	44	5	US-08-117-375-18	Sequence 18, Appl
951	18.8	1.2	44	9	US-08-596-382-18	Sequence 18, Appl
c 952	18.8	1.2	44	18	US-09-404-520-33866	Sequence 33866, A
953	18.8	1.2	44	23	US-09-605-700-10920	Sequence 10920, A
954	18.8	1.2	44	42	US-10-227-565-23722	Sequence 23722, A
955	18.8	1.2	45	1	PCT-US02-25943-23770	Sequence 23770, A
956	18.8	1.2	45	18	US-09-404-520-41743	Sequence 41743, A
957	18.8	1.2	45	32	US-09-847-662-640	Sequence 640, App
958	18.8	1.2	45	42	US-10-227-565-23770	Sequence 23770, A
c 959	18.8	1.2	45	58	US-60-141-728-23	Sequence 23, Appl
c 960	18.8	1.2	45	58	US-60-141-728-24	Sequence 24, Appl
c 961	18.8	1.2	45	58	US-60-141-728-26	Sequence 26, Appl
c 962	18.8	1.2	46	1	PCT-US02-25943-13274	Sequence 13274, A
c 963	18.8	1.2	46	1	PCT-US02-25943-15255	Sequence 15255, A
c 964	18.8	1.2	46	8	US-08-472-801-260	Sequence 260, App
c 965	18.8	1.2	46	10	US-08-668-235-261	Sequence 261, App
966	18.8	1.2	46	41	US-10-168-809-19	Sequence 19, Appl
c 967	18.8	1.2	46	42	US-10-227-565-13274	Sequence 13274, A
c 968	18.8	1.2	46	42	US-10-227-565-15255	Sequence 15255, A
c 969	18.8	1.2	46	69	US-60-253-654-19101	Sequence 19101, A
c 970	18.8	1.2	46	69	US-60-255-592-19101	Sequence 19101, A
971	18.8	1.2	47	1	PCT-US02-25943-1527	Sequence 1527, Ap
972	18.8	1.2	47	1	PCT-US02-25943-13316	Sequence 13316, A
973	18.8	1.2	47	1	PCT-US02-25943-15799	Sequence 15799, A
974	18.8	1.2	47	1	PCT-US02-25943-27963	Sequence 27963, A
975	18.8	1.2	47	1	PCT-US02-25943-28002	Sequence 28002, A
c 976	18.8	1.2	47	9	US-08-503-525-51	Sequence 51, Appl
c 977	18.8	1.2	47	16	US-09-215-712-51	Sequence 51, Appl
c 978	18.8	1.2	47	16	US-09-215-989-51	Sequence 51, Appl
c 979	18.8	1.2	47	18	US-09-422-978-2716	Sequence 2716, Ap
980	18.8	1.2	47	42	US-10-227-565-1527	Sequence 1527, Ap
981	18.8	1.2	47	42	US-10-227-565-13316	Sequence 13316, A
982	18.8	1.2	47	42	US-10-227-565-15799	Sequence 15799, A
983	18.8	1.2	47	42	US-10-227-565-27963	Sequence 27963, A
984	18.8	1.2	47	42	US-10-227-565-28002	Sequence 28002, A
985	18.8	1.2	47	65	US-60-216-745-1297	Sequence 1297, Ap
986	18.8	1.2	47	69	US-60-252-833-18788	Sequence 18788, A
c 987	18.8	1.2	48	1	PCT-US02-25943-18755	Sequence 18755, A
988	18.8	1.2	48	1	PCT-US02-25943-22358	Sequence 22358, A
989	18.8	1.2	48	1	PCT-US99-06554-2	Sequence 2, Appli
c 990	18.8	1.2	48	6	US-08-224-010A-25	Sequence 25, Appl
c 991	18.8	1.2	48	6	US-08-224-010B-25	Sequence 25, Appl
992	18.8	1.2	48	7	US-08-351-414-11	Sequence 11, Appl
c 993	18.8	1.2	48	17	US-09-399-932-3610	Sequence 3610, Ap
c 994	18.8	1.2	48	42	US-10-227-565-18755	Sequence 18755, A
995	18.8	1.2	48	42	US-10-227-565-22358	Sequence 22358, A
c 996	18.8	1.2	50	1	PCT-US01-47856-1563	Sequence 1563, Ap
997	18.8	1.2	50	1	PCT-US01-47856-4569	Sequence 4569, Ap
998	18.8	1.2	50	1	PCT-US02-25943-17406	Sequence 17406, A
999	18.8	1.2	50	1	PCT-US02-25943-64136	Sequence 64136, A
1000	18.8	1.2	50	1	PCT-US02-25943-64137	Sequence 64137, A

ALIGNMENTS

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RESULT 1
US-09-590-211-9
; Sequence 9, Application US/09590211
; GENERAL INFORMATION:
;  APPLICANT: Rouleau, Guy A.
;  APPLICANT:  Brais, Bernard
;  TITLE OF INVENTION: Short GCG Expansions in the PAB II Gene
;  TITLE OF INVENTION:  for Oculopharyngeal Muscular Dystrophy and Diagnostic
;  TITLE OF INVENTION:  Thereof
;  FILE REFERENCE: 3028.1000-000
;  CURRENT APPLICATION NUMBER: US/09/590,211
;  CURRENT FILING DATE:  2000-06-08
;  PRIOR APPLICATION NUMBER: PCT/CA98/01133
;  PRIOR FILING DATE: 1998-12-07
;  PRIOR APPLICATION NUMBER: 2,218,199
;  PRIOR FILING DATE: 1997-12-09
;  NUMBER OF SEQ ID NOS: 21
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 9
;   LENGTH: 45
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-590-211-9

  Query Match             2.0%;  Score 31.8;  DB 22;  Length 45;
  Best Local Similarity   83.7%;  Pred. No. 1.7e+05;
  Matches   36;  Conservative    0;  Mismatches    7;  Indels    0;  Gaps    0;

Qy    1343 GGCGGGGACAGCGGCGGCGGGGACCGCGGGGGCGGCGGCGGCA 1385
           ||||| | | |||||||||| | | |||| ||||||||||||
Db       3 GGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCA 45


RESULT 2
US-09-590-211A-9
; Sequence 9, Application US/09590211A
; GENERAL INFORMATION:
;  APPLICANT: Rouleau, Guy A.
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 ;  APPLICANT:  Brais, Bernard
 ;  TITLE OF INVENTION: SHORT GCG EXPANSIONS IN THE PAB II GENE
 ;  TITLE OF INVENTION:  FOR OCULOPHARYNGEAL MUSCULAR DYSTROPHY AND DIAGNOSTIC THereof
 ;  FILE REFERENCE: 3028.1000-000
 ;  CURRENT APPLICATION NUMBER: US/09/590,211A
 ;  CURRENT FILING DATE:  2000-06-08
 ;  PRIOR APPLICATION NUMBER: PCT/CA98/01133
 ;  PRIOR FILING DATE: 1998-12-07
 ;  PRIOR APPLICATION NUMBER: 2,218,199
 ;  PRIOR FILING DATE: 1997-12-09
 ;  NUMBER OF SEQ ID NOS: 21
 ;  SOFTWARE: FastSEQ for Windows Version 4.0
 ; SEQ ID NO 9
 ;   LENGTH: 45
 ;   TYPE: DNA
 ;   ORGANISM: Homo sapiens
US-09-590-211A-9

  Query Match             2.0%;  Score 31.8;  DB 22;  Length 45;
  Best Local Similarity   83.7%;  Pred. No. 1.7e+05;
  Matches   36;  Conservative    0;  Mismatches    7;  Indels    0;  Gaps    0;

Qy   1343 GGCGGGGACAGCGGCGGCGGGGACCGCGGGGGCGGCGGCGGCA 1385
           ||||| | | |||||||||| | | |||| ||||||||||||||
Db      3 GGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCA 45


RESULT 3
US-09-782-650-16
; Sequence 16, Application US/09782650
; GENERAL INFORMATION:
 ;  APPLICANT: Levine, Arnold J.
 ;  APPLICANT:  Mitterer, Artur
 ;  APPLICANT:  Falkner, Falko-Guenter
 ;  APPLICANT:  Scheiflinger, Friedrich
 ;  APPLICANT:  Dorner, Friedrich
 ;  APPLICANT:  Edwards LifeSciences Corporation
 ;  TITLE OF INVENTION: Targeted Angiogenesis
 ;  FILE REFERENCE: 20553D-000611US
 ;  CURRENT APPLICATION NUMBER: US/09/782,650
 ;  CURRENT FILING DATE:  2001-02-12
 ;  PRIOR APPLICATION NUMBER: US 09/324,079
 ;  PRIOR FILING DATE: 1999-06-01
 ;  PRIOR APPLICATION NUMBER: US 09/327,045
 ;  PRIOR FILING DATE: 1999-06-07
 ;  PRIOR APPLICATION NUMBER: PCT/US00/14988
 ;  PRIOR FILING DATE: 2000-05-31
 ;  NUMBER OF SEQ ID NOS: 24
 ;  SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 16
 ;   LENGTH: 50
 ;   TYPE: DNA
 ;   ORGANISM: Artificial Sequence
 ;   FEATURE:
 ;   OTHER INFORMATION: Description of Artificial Sequence:annealed
 ;   OTHER INFORMATION: oligonucleotide
US-09-782-650-16

  Query Match             2.0%;  Score 31.4;  DB 30;  Length 50;
  Best Local Similarity   85.4%;  Pred. No. 1.9e+05;
  Matches   35;  Conservative    0;  Mismatches    6;  Indels    0;  Gaps    0;

Qy   1341 GCGGCGGGGACAGCGGCGGCGGGGACCGCGGGGGCGGCGGC 1381
           ||||||| | |||||||||||| | | |||| |||||||||
Db      7 GCGGCGGCGGCAGCGGCGGCGGCGGCAGCGGCGGCGGCGGC 47


RESULT 4
US-09-590-211-8
; Sequence 8, Application US/09590211
; GENERAL INFORMATION:
 ;  APPLICANT: Rouleau, Guy A.
 ;  APPLICANT:  Brais, Bernard
 ;  TITLE OF INVENTION: Short GCG Expansions in the PAB II Gene
 ;  TITLE OF INVENTION:  for Oculopharyngeal Muscular Dystrophy and Diagnostic
 ;  TITLE OF INVENTION:  Thereof
 ;  FILE REFERENCE: 3028.1000-000
 ;  CURRENT APPLICATION NUMBER: US/09/590,211
 ;  CURRENT FILING DATE:  2000-06-08
 ;  PRIOR APPLICATION NUMBER: PCT/CA98/01133
 ;  PRIOR FILING DATE: 1998-12-07
 ;  PRIOR APPLICATION NUMBER: 2,218,199
 ;  PRIOR FILING DATE: 1997-12-09
 ;  NUMBER OF SEQ ID NOS: 21
 ;  SOFTWARE: FastSEQ for Windows Version 4.0
 ; SEQ ID NO 8
 ;   LENGTH: 42
 ;   TYPE: DNA
 ;   ORGANISM: Homo sapiens
US-09-590-211-8

  Query Match             1.8%;  Score 28.8;  DB 22;  Length 42;
  Best Local Similarity   82.5%;  Pred. No. 5e+05;
  Matches   33;  Conservative    0;  Mismatches    7;  Indels    0;  Gaps    0;

Qy   1346 GGGGACAGCGGCGGCGGGGACCGCGGGGGCGGCGGCGGCA 1385
           || | | |||||||||| | | |||| |||||||||||||
Db      3 GGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCA 42


RESULT 5
US-09-590-211A-8
; Sequence 8, Application US/09590211A
; GENERAL INFORMATION:
 ;  APPLICANT: Rouleau, Guy A.
 ;  APPLICANT:  Brais, Bernard
 ;  TITLE OF INVENTION: SHORT GCG EXPANSIONS IN THE PAB II GENE
 ;  TITLE OF INVENTION:  FOR OCULOPHARYNGEAL MUSCULAR DYSTROPHY AND DIAGNOSTIC THer
 ;  FILE REFERENCE: 3028.1000-000
 ;  CURRENT APPLICATION NUMBER: US/09/590,211A
 ;  CURRENT FILING DATE:  2000-06-08
 ;  PRIOR APPLICATION NUMBER: PCT/CA98/01133
 ;  PRIOR FILING DATE: 1998-12-07
 ;  PRIOR APPLICATION NUMBER: 2,218,199
 ;  PRIOR FILING DATE: 1997-12-09
 ;  NUMBER OF SEQ ID NOS: 21
 ;  SOFTWARE: FastSEQ for Windows Version 4.0
 ; SEQ ID NO 8
 ;   LENGTH: 42
 ;   TYPE: DNA
 ;   ORGANISM: Homo sapiens
US-09-590-211A-8

  Query Match             1.8%;  Score 28.8;  DB 22;  Length 42;
  Best Local Similarity   82.5%;  Pred. No. 5e+05;
  Matches   33;  Conservative    0;  Mismatches    7;  Indels    0;  Gaps    0;

Qy   1346 GGGGACAGCGGCGGCGGGGACCGCGGGGGCGGCGGCGGCA 1385
           || | | |||||||||| | | |||| |||||||||||||
Db      3 GGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCA 42


RESULT 6
PCT-US02-26129-14
; Sequence 14, Application PC/TUS0226129
; GENERAL INFORMATION:
 ;  APPLICANT: OriGene Technologies
 ;  APPLICANT:  OriGene Technologies
 ;  TITLE OF INVENTION: Serine Protein Kinase in Brain and Pancreas
 ;  FILE REFERENCE: 16U 101 PCT
 ;  CURRENT APPLICATION NUMBER: PCT/US02/26129
 ;  CURRENT FILING DATE:  2002-08-16
 ;  PRIOR APPLICATION NUMBER: US 09/930,181
 ;  PRIOR FILING DATE: 2001-08-16
 ;  NUMBER OF SEQ ID NOS: 18
 ;  SOFTWARE: PatentIn version 3.1
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; SEQ ID NO 14
;   LENGTH: 50
;   TYPE: DNA
;   ORGANISM: Homo sapiens
PCT-US02-26129-14

  Query Match             1.8%;  Score 28.2;  DB 1;  Length 50;
  Best Local Similarity   73.5%;  Pred. No. 6.2e+05;
  Matches   36;  Conservative    0;  Mismatches   13;  Indels    0;  Gaps    0;

Qy   1336 GGACCGCGGCGGGGACAGCGGCGGCGGGGACCGCGGGGGCGGCGGCGGC 1384
          ||  || |||| || |  ||||||||| | | |||| ||||||||  || -
Db      1 GGCGCGGGGCGCGGGCCTCGGCGGCGGCGGCGGCGGCGGCGGCGGAAGC 49


RESULT 7
US-10-195-071-14
; Sequence 14, Application US/10195071
; GENERAL INFORMATION:
;  APPLICANT: OriGene Technologies
;  TITLE OF INVENTION: Full-Length Serine Protein Kinase in Brain and Pancreas
;  FILE REFERENCE: 16U 101 C1
;  CURRENT APPLICATION NUMBER: US/10/195,071
;  CURRENT FILING DATE:  2002-07-15
;  PRIOR APPLICATION NUMBER: US 09/930,181
;  PRIOR FILING DATE: 2001-08-16
;  NUMBER OF SEQ ID NOS: 18
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 14
;   LENGTH: 50
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-195-071-14

  Query Match             1.8%;  Score 28.2;  DB 41;  Length 50;
  Best Local Similarity   73.5%;  Pred. No. 6.2e+05;
  Matches   36;  Conservative    0;  Mismatches   13;  Indels    0;  Gaps    0;

Qy   1336 GGACCGCGGCGGGGACAGCGGCGGCGGGGACCGCGGGGGCGGCGGCGGC 1384
          ||  || |||| || |  ||||||||| | | |||| ||||||||  ||
Db      1 GGCGCGGGGCGCGGGCCTCGGCGGCGGCGGCGGCGGCGGCGGCGGAAGC 49


RESULT 8
US-10-195-072-14
; Sequence 14, Application US/10195072
; GENERAL INFORMATION:
;  APPLICANT: OriGene Technologies
;  TITLE OF INVENTION: Full-Length Serine Protein Kinase in Brain and Pancreas
;  FILE REFERENCE: 16U 101 C2
;  CURRENT APPLICATION NUMBER: US/10/195,072
;  CURRENT FILING DATE:  2002-07-15
;  PRIOR APPLICATION NUMBER: US 09/930,181
;  PRIOR FILING DATE: 2001-08-16
;  NUMBER OF SEQ ID NOS: 18
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 14
;   LENGTH: 50
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-195-072-14

  Query Match             1.8%;  Score 28.2;  DB 41;  Length 50;
  Best Local Similarity   73.5%;  Pred. No. 6.2e+05;
  Matches   36;  Conservative    0;  Mismatches   13;  Indels    0;  Gaps    0;

Qy   1336 GGACCGCGGCGGGGACAGCGGCGGCGGGGACCGCGGGGGCGGCGGCGGC 1384
          ||  || |||| || |  ||||||||| | | |||| ||||||||  ||
Db      1 GGCGCGGGGCGCGGGCCTCGGCGGCGGCGGCGGCGGCGGCGGCGGAAGC 49


RESULT 9
US-09-590-211-7
; Sequence 7, Application US/09590211
; GENERAL INFORMATION:
;  APPLICANT: Rouleau, Guy A.
;  APPLICANT:  Brais, Bernard
;  TITLE OF INVENTION: Short GCG Expansions in the PAB II Gene
;  TITLE OF INVENTION:  for Oculopharyngeal Muscular Dystrophy and Diagnostic
;  TITLE OF INVENTION:  Thereof
;  FILE REFERENCE: 3028.1000-000
;  CURRENT APPLICATION NUMBER: US/09/590,211
;  CURRENT FILING DATE:  2000-06-08
;  PRIOR APPLICATION NUMBER: PCT/CA98/01133
;  PRIOR FILING DATE: 1998-12-07
;  PRIOR APPLICATION NUMBER: 2,218,199
;  PRIOR FILING DATE: 1997-12-09
;  NUMBER OF SEQ ID NOS: 21
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 7
;   LENGTH: 39
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-590-211-7

  Query Match             1.7%;  Score 27.4;  DB 22;  Length 39;
  Best Local Similarity   83.8%;  Pred. No. 8.4e+05;
  Matches   31;  Conservative    0;  Mismatches    6;  Indels    0;  Gaps    0;

Qy   1349 GACAGCGGCGGCGGGGACCGCGGGGGCGGCGGCGGCA 1385
          | | |||||||||| | | |||| ||||||||||||
Db      3 GGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCA 39


RESULT 10
US-09-590-211A-7
; Sequence 7, Application US/09590211A
; GENERAL INFORMATION:
;  APPLICANT: Rouleau, Guy A.
;  APPLICANT:  Brais, Bernard
;  TITLE OF INVENTION: SHORT GCG EXPANSIONS IN THE PAB II GENE
;  TITLE OF INVENTION:  FOR OCULOPHARYNGEAL MUSCULAR DYSTROPHY AND DIAGNOSTIC THere
;  FILE REFERENCE: 3028.1000-000
;  CURRENT APPLICATION NUMBER: US/09/590,211A
;  CURRENT FILING DATE:  2000-06-08
;  PRIOR APPLICATION NUMBER: PCT/CA98/01133
;  PRIOR FILING DATE: 1998-12-07
;  PRIOR APPLICATION NUMBER: 2,218,199
;  PRIOR FILING DATE: 1997-12-09
;  NUMBER OF SEQ ID NOS: 21
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 7
;   LENGTH: 39
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-590-211A-7

  Query Match             1.7%;  Score 27.4;  DB 22;  Length 39;
  Best Local Similarity   83.8%;  Pred. No. 8.4e+05;
  Matches   31;  Conservative    0;  Mismatches    6;  Indels    0;  Gaps    0;

Qy   1349 GACAGCGGCGGCGGGGACCGCGGGGGCGGCGGCGGCA 1385
          | | |||||||||| | | |||| ||||||||||||
Db      3 GGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCA 39


RESULT 11
US-09-992-665-289/c
; Sequence 289, Application US/09992665
; GENERAL INFORMATION:
;  APPLICANT: Kaia Palm
;  TITLE OF INVENTION: PROFILING TUMOR SPECIFIC MARKERS FOR THE
;  TITLE OF INVENTION:  DIAGNOSIS AND TREATMENT OF NEOPLASTIC DISEASE
;  FILE REFERENCE: CEMINES.002A
;  CURRENT APPLICATION NUMBER: US/09/992,665
;  CURRENT FILING DATE:  2001-11-13
```

```
;  PRIOR APPLICATION NUMBER: 60/249,508
;  PRIOR FILING DATE: 2000-11-16
;  NUMBER OF SEQ ID NOS: 380
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 289
;    LENGTH: 27
;    TYPE: DNA
;    ORGANISM: Artificial Sequence
;    FEATURE:
;    OTHER INFORMATION: Probe
US-09-992-665-289

  Query Match             1.7%;  Score 27;  DB 37;  Length 27;
  Best Local Similarity   100.0%;  Pred. No. 1e+06;
  Matches   27;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy     755 TCGGCCACGGTGCACCTGGAGCAGGGC 781
           ||||||||||||||||||||||||||||
Db      27 TCGGCCACGGTGCACCTGGAGCAGGGC 1


RESULT 12
US-09-590-211-6
; Sequence 6, Application US/09590211
; GENERAL INFORMATION:
;  APPLICANT: Rouleau, Guy A.
;  APPLICANT:  Brais, Bernard
;  TITLE OF INVENTION: Short GCG Expansions in the PAB II Gene
;  TITLE OF INVENTION:  for Oculopharyngeal Muscular Dystrophy and Diagnostic
;  TITLE OF INVENTION:  Thereof
;  FILE REFERENCE: 3028.1000-000
;  CURRENT APPLICATION NUMBER: US/09/590,211
;  CURRENT FILING DATE:  2000-06-08
;  PRIOR APPLICATION NUMBER: PCT/CA98/01133
;  PRIOR FILING DATE: 1998-12-07
;  PRIOR APPLICATION NUMBER: 2,218,199
;  PRIOR FILING DATE: 1997-12-09
;  NUMBER OF SEQ ID NOS: 21
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 6
;    LENGTH: 36
;    TYPE: DNA
;    ORGANISM: Homo sapiens
US-09-590-211-6

  Query Match             1.7%;  Score 26.6;  DB 22;  Length 36;
  Best Local Similarity   87.9%;  Pred. No. 1.1e+06;
  Matches   29;  Conservative    0;  Mismatches    4;  Indels    0;  Gaps    0;

Qy    1353 GCGGCGGCGGGGACCGCGGGGGCGGCGGCGGCA 1385
           |||||||||| | | |||| ||||||||||||
Db       4 GCGGCGGCGGCGGCGGCGGCGGCGGCGGCA 36


RESULT 13
US-09-590-211A-6
; Sequence 6, Application US/09590211A
; GENERAL INFORMATION:
;  APPLICANT: Rouleau, Guy A.
;  APPLICANT:  Brais, Bernard
;  TITLE OF INVENTION: SHORT GCG EXPANSIONS IN THE PAB II GENE
;  TITLE OF INVENTION:  FOR OCULOPHARYNGEAL MUSCULAR DYSTROPHY AND DIAGNOSTIC THereof
;  FILE REFERENCE: 3028.1000-000
;  CURRENT APPLICATION NUMBER: US/09/590,211A
;  CURRENT FILING DATE:  2000-06-08
;  PRIOR APPLICATION NUMBER: PCT/CA98/01133
;  PRIOR FILING DATE: 1998-12-07
;  PRIOR APPLICATION NUMBER: 2,218,199
;  PRIOR FILING DATE: 1997-12-09
;  NUMBER OF SEQ ID NOS: 21
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 6
;    LENGTH: 36
;    TYPE: DNA
;    ORGANISM: Homo sapiens
US-09-590-211A-6

  Query Match             1.7%;  Score 26.6;  DB 22;  Length 36;
  Best Local Similarity   87.9%;  Pred. No. 1.1e+06;
  Matches   29;  Conservative    0;  Mismatches    4;  Indels    0;  Gaps    0;

Qy    1353 GCGGCGGCGGGGACCGCGGGGGCGGCGGCGGCA 1385
           |||||||||| | | |||| ||||||||||||
Db       4 GCGGCGGCGGCGGCGGCGGCGGCGGCGGCA 36


RESULT 14
US-09-423-041A-2/c
; Sequence 2, Application US/09423041A
; GENERAL INFORMATION:
;  APPLICANT: Cassandra L. Smith
;  TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR TARGETED
;  TITLE OF INVENTION:  DNA DIFFERENTIAL DISPLAY
;  FILE REFERENCE: BU-042XX
;  CURRENT APPLICATION NUMBER: US/09/423,041A
;  CURRENT FILING DATE:  2000-04-05
;  PRIOR APPLICATION NUMBER: PCT/US98/08616
;  PRIOR FILING DATE: 1998-04-29
;  PRIOR APPLICATION NUMBER: US60/045,078
;  PRIOR FILING DATE: 1997-04-29
;  NUMBER OF SEQ ID NOS: 44
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 2
;    LENGTH: 36
;    TYPE: DNA
;    ORGANISM: Artificial Sequence
;    FEATURE:
;    OTHER INFORMATION: Probe/Primer
US-09-423-041A-2

  Query Match             1.7%;  Score 26.4;  DB 18;  Length 36;
  Best Local Similarity   83.3%;  Pred. No. 1.2e+06;
  Matches   30;  Conservative    0;  Mismatches    6;  Indels    0;  Gaps    0;

Qy    1351 CAGCGGCGGCGGGGACCGCGGGGGCGGCGGCGGCAG 1386
           | |||||||||| | | |||| |||||||||||| |
Db      36 CGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 1


RESULT 15
PCT-US00-19843-13
; Sequence 13, Application PC/TUS0019843
; GENERAL INFORMATION:
;  APPLICANT:  Herr, John C.                                          ;
;  APPLICANT:  Norton, Elizabeth J.
;  APPLICANT:  Deikman, Alan B.
;  TITLE OF INVENTION:  Recombinant Antibody Directed Against Human Sperm
;  TITLE OF INVENTION:  Antigen
;  FILE REFERENCE:  00415-02
;  CURRENT APPLICATION NUMBER: PCT/US00/19843
;  CURRENT FILING DATE:  2000-07-21
;  PRIOR APPLICATION NUMBER:  60/145,512
;  PRIOR FILING DATE:  1999-07-23
;  NUMBER OF SEQ ID NOS:  18
;  SOFTWARE:  PatentIn Ver. 2.1
; SEQ ID NO 13
;    LENGTH: 45
;    TYPE: DNA
;    ORGANISM: Artificial Sequence
;    FEATURE:
;    OTHER INFORMATION: Description of Artificial Sequence:nucleic acid
;    OTHER INFORMATION: linker
PCT-US00-19843-13

  Query Match             1.7%;  Score 26.4;  DB 1;  Length 45;
  Best Local Similarity   75.0%;  Pred. No. 1.2e+06;
```

```
  Matches   33;  Conservative    0;  Mismatches   11;  Indels    0;  Gaps    0;

Qy   1341 GCGGCGGGGACAGCGGCGGCGGGGACCGCGGGGGCGGCGGCGGC 1384
          ||||||| | |||||| || || |     ||||||||||| ||
Db      2 GCGGCGGCGGCAGCGGTGGTGGTGGTTCTGGGGGCGGCGGCAGC 45


RESULT 16
US-10-031-783-13
; Sequence 13, Application US/10031783
; GENERAL INFORMATION:
;  APPLICANT: Herr, John C.
;  APPLICANT:  Norton, Elizabeth J.
;  APPLICANT:  Deikman, Alan B.
;  TITLE OF INVENTION: Recombinant Antibody Directed Against Human Sperm
;  TITLE OF INVENTION:  Antigen
;  FILE REFERENCE: 00415-02
;  CURRENT APPLICATION NUMBER: US/10/031,783
;  CURRENT FILING DATE:  2002-10-23
;  PRIOR APPLICATION NUMBER: 60/145,512
;  PRIOR FILING DATE: 1999-07-23
;  NUMBER OF SEQ ID NOS: 18
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 13
;   LENGTH: 45
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:nucleic acid
;   OTHER INFORMATION: linker
US-10-031-783-13

  Query Match             1.7%;  Score 26.4;  DB 38;  Length 45;
  Best Local Similarity   75.0%;  Pred. No. 1.2e+06;
  Matches   33;  Conservative    0;  Mismatches   11;  Indels    0;  Gaps    0;

Qy   1341 GCGGCGGGGACAGCGGCGGCGGGGACCGCGGGGGCGGCGGCGGC 1384
          ||||||| | |||||| || || |     ||||||||||| ||
Db      2 GCGGCGGCGGCAGCGGTGGTGGTGGTTCTGGGGGCGGCGGCAGC 45


RESULT 17
US-09-606-755-17709
; Sequence 17709, Application US/09606755
; GENERAL INFORMATION:
;  APPLICANT: Havukkala, Ilkka
;  APPLICANT:  Shenk, Michael A.
;  TITLE OF INVENTION: Polynucleotides, Materials Incorporating
;  TITLE OF INVENTION:  Them, and Methods for Using Them
;  FILE REFERENCE: 11000.1041U6
;  CURRENT APPLICATION NUMBER: US/09/606,755
;  CURRENT FILING DATE:  2000-06-22
;  NUMBER OF SEQ ID NOS: 17747
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 17709
;   LENGTH: 50
;   TYPE: DNA
;   ORGANISM: Pinus radiata
US-09-606-755-17709

  Query Match             1.6%;  Score 26;  DB 23;  Length 50;
  Best Local Similarity   70.0%;  Pred. No. 1.4e+06;
  Matches   35;  Conservative    0;  Mismatches   15;  Indels    0;  Gaps    0;

Qy     19 GAGAGAGCGAGCGGGCGAGCCGGAGCGAGGAAGGGAAAGCGCAAGAGAGA 68
          ||||||| ||| | | |||   ||| |||  || || || |  |||||||
Db      1 GAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGA 50


RESULT 18
US-09-857-723-178/c
; Sequence 178, Application US/09857723
; GENERAL INFORMATION:
;  APPLICANT: Alcivar-Warren, Acacia
;  APPLICANT:  Xu, Zhenkang
;  APPLICANT:  Dhar, Arun K.
;  APPLICANT:  Fan, Yongjun
;  APPLICANT:  Meehan, Dawn
;  APPLICANT:  Garcia, Denise K.
;  TITLE OF INVENTION: NUCLEIC ACID MOLECULES OF SHRIMP
;  FILE REFERENCE: 1322.1023-003
;  CURRENT APPLICATION NUMBER: US/09/857,723
;  CURRENT FILING DATE:  2001-06-07
;  PRIOR APPLICATION NUMBER: 60/111,670
;  PRIOR FILING DATE: 1998-12-10
;  NUMBER OF SEQ ID NOS: 292
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 178
;   LENGTH: 50
;   TYPE: DNA
;   ORGANISM: Litopenaeus vannamei
;   FEATURE:
;   NAME/KEY: satellite
;   LOCATION: (1)...(50)
US-09-857-723-178

  Query Match             1.6%;  Score 26;  DB 32;  Length 50;
  Best Local Similarity   70.0%;  Pred. No. 1.4e+06;
  Matches   35;  Conservative    0;  Mismatches   15;  Indels    0;  Gaps    0;

Qy     19 GAGAGAGCGAGCGGGCGAGCCGGAGCGAGGAAGGGAAAGCGCAAGAGAGA 68
          ||||||| ||| | | |||   ||| |||  || || || |  |||||||
Db     50 GAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGA 1


RESULT 19
US-09-857-723-187/c
; Sequence 187, Application US/09857723
; GENERAL INFORMATION:
;  APPLICANT: Alcivar-Warren, Acacia
;  APPLICANT:  Xu, Zhenkang
;  APPLICANT:  Dhar, Arun K.
;  APPLICANT:  Fan, Yongjun
;  APPLICANT:  Meehan, Dawn
;  APPLICANT:  Garcia, Denise K.
;  TITLE OF INVENTION: NUCLEIC ACID MOLECULES OF SHRIMP
;  FILE REFERENCE: 1322.1023-003
;  CURRENT APPLICATION NUMBER: US/09/857,723
;  CURRENT FILING DATE:  2001-06-07
;  PRIOR APPLICATION NUMBER: 60/111,670
;  PRIOR FILING DATE: 1998-12-10
;  NUMBER OF SEQ ID NOS: 292
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 187
;   LENGTH: 50
;   TYPE: DNA
;   ORGANISM: Litopenaeus vannamei
;   FEATURE:
;   NAME/KEY: satellite
;   LOCATION: (1)...(50)
US-09-857-723-187

  Query Match             1.6%;  Score 26;  DB 32;  Length 50;
  Best Local Similarity   70.0%;  Pred. No. 1.4e+06;
  Matches   35;  Conservative    0;  Mismatches   15;  Indels    0;  Gaps    0;

Qy     20 AGAGAGCGAGCGGGCGAGCCGGAGCGAGGAAGGGAAAGCGCAAGAGAGAG 69
          |||||| ||| | | |||   ||| |||  || || || |  ||||||||
Db     50 AGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1


RESULT 20
US-09-857-723-199/c
; Sequence 199, Application US/09857723
; GENERAL INFORMATION:
;  APPLICANT: Alcivar-Warren, Acacia
```

```
 ;  APPLICANT:  Xu, Zhenkang
 ;  APPLICANT:  Dhar, Arun K.
 ;  APPLICANT:  Fan, Yongjun
 ;  APPLICANT:  Meehan, Dawn
 ;  APPLICANT:  Garcia, Denise K.
 ;  TITLE OF INVENTION: NUCLEIC ACID MOLECULES OF SHRIMP
 ;  FILE REFERENCE: 1322.1023-003
 ;  CURRENT APPLICATION NUMBER: US/09/857,723
 ;  CURRENT FILING DATE:  2001-06-07
 ;  PRIOR APPLICATION NUMBER: 60/111,670
 ;  PRIOR FILING DATE: 1998-12-10
 ;  NUMBER OF SEQ ID NOS: 292
 ;  SOFTWARE: FastSEQ for Windows Version 4.0
 ; SEQ ID NO 199
 ;    LENGTH: 50
 ;    TYPE: DNA
 ;    ORGANISM: Litopenaeus vannamei
 ;    FEATURE:
 ;    NAME/KEY: satellite
 ;    LOCATION: (1)...(50)
US-09-857-723-199

  Query Match             1.6%;  Score 26;  DB 32;  Length 50;
  Best Local Similarity   70.0%;  Pred. No. 1.4e+06;
  Matches   35;  Conservative    0;  Mismatches   15;  Indels    0;  Gaps    0;

Qy      19 GAGAGAGCGAGCGGGCGAGCCGGAGCGAGGAAGGGAAAGCGCAAGAGAGA 68
           ||||||| ||| | | |||   ||| |||  || || || |  |||||||
Db      50 GAGAGAGGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGA 1


RESULT 21
US-08-715-713-17
; Sequence 17, Application US/08715713
;  GENERAL INFORMATION:
;    APPLICANT:  Innis, Jeffrey W.
;    APPLICANT:  Mortlock, Douglas P.
;    APPLICANT:  Nelson, Matt
;    TITLE OF INVENTION:  PROMOTER CAPTURE
;    NUMBER OF SEQUENCES:  19
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Medlen & Carroll, LLP
;      STREET:  220 Montomgery Street, Suite 2200
;      CITY:  San Francisco
;      STATE:  California
;      COUNTRY:  United States of America
;      ZIP:  94104
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/715,713
;      FILING DATE:  19-SEP-1996
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Carroll, Peter G.
;      REGISTRATION NUMBER:  32,837
;      REFERENCE/DOCKET NUMBER:  UM-02402
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (415) 705-8410
;      TELEFAX:  (415) 397-8338
;  INFORMATION FOR SEQ ID NO:  17:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  50 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  double
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  other nucleic acid
;      DESCRIPTION:  /desc = "DNA"
US-08-715-713-17

  Query Match             1.6%;  Score 25.6;  DB 11;  Length 50;
  Best Local Similarity   77.5%;  Pred. No. 1.6e+06;
  Matches   31;  Conservative    0;  Mismatches    9;  Indels    0;  Gaps    0;

Qy    1337 GACCGCGGCGGGGACAGCGGCGGCGGGGACCGCGGGGGCG 1376
           |||  |||||| | ||||||||||||   | |||| ||||
Db      11 GACAACGGCGGCGGCAGCGGCGGCGGCCGCGGCGGCGGCG 50


RESULT 22
US-09-396-196F-67173
; Sequence 67173, Application US/09396196F
; GENERAL INFORMATION:
;  APPLICANT: Michael Mittmann
;  APPLICANT:  David Mack
;  APPLICANT:  David Lockhart
;  APPLICANT:  Affymetrix, Inc.
;  TITLE OF INVENTION: Methods of Genetic Analysis
;  FILE REFERENCE: 3101.1
;  CURRENT APPLICATION NUMBER: US/09/396,196F
;  CURRENT FILING DATE:  2001-09-15
;  PRIOR APPLICATION NUMBER: 60/100,678
;  PRIOR FILING DATE: 1998-09-17
;  NUMBER OF SEQ ID NOS: 127806
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 67173
;    LENGTH: 25
;    TYPE: DNA
;    ORGANISM: mus musculus
US-09-396-196F-67173

  Query Match             1.6%;  Score 25;  DB 17;  Length 25;
  Best Local Similarity   100.0%;  Pred. No. 2.1e+06;
  Matches   25;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    1443 GCATCCACTGGTACTCGCAGCTGCT 1467
           |||||||||||||||||||||||||
Db       1 GCATCCACTGGTACTCGCAGCTGCT 25


RESULT 23
US-09-396-196F-67174
; Sequence 67174, Application US/09396196F
; GENERAL INFORMATION:
;  APPLICANT: Michael Mittmann
;  APPLICANT:  David Mack
;  APPLICANT:  David Lockhart
;  APPLICANT:  Affymetrix, Inc.
;  TITLE OF INVENTION: Methods of Genetic Analysis
;  FILE REFERENCE: 3101.1
;  CURRENT APPLICATION NUMBER: US/09/396,196F
;  CURRENT FILING DATE:  2001-09-15
;  PRIOR APPLICATION NUMBER: 60/100,678
;  PRIOR FILING DATE: 1998-09-17
;  NUMBER OF SEQ ID NOS: 127806
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 67174
;    LENGTH: 25
;    TYPE: DNA
;    ORGANISM: mus musculus
US-09-396-196F-67174

  Query Match             1.6%;  Score 25;  DB 17;  Length 25;
  Best Local Similarity   100.0%;  Pred. No. 2.1e+06;
  Matches   25;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    1446 TCCACTGGTACTCGCAGCTGCTCTA 1470
           |||||||||||||||||||||||||
Db       1 TCCACTGGTACTCGCAGCTGCTCTA 25


RESULT 24
US-09-396-196F-67183
```

```
; Sequence 67183, Application US/09396196F
; GENERAL INFORMATION:
;  APPLICANT: Michael Mittmann
;  APPLICANT:  David Mack
;  APPLICANT:  David Lockhart
;  APPLICANT:  Affymetrix, Inc.
;  TITLE OF INVENTION: Methods of Genetic Analysis
;  FILE REFERENCE: 3101.1
;  CURRENT APPLICATION NUMBER: US/09/396,196F
;  CURRENT FILING DATE:  2001-09-15
;  PRIOR APPLICATION NUMBER: 60/100,678
;  PRIOR FILING DATE: 1998-09-17
;  NUMBER OF SEQ ID NOS: 127806
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 67183
;   LENGTH: 25
;   TYPE: DNA
;   ORGANISM: mus musculus
US-09-396-196F-67183

  Query Match             1.6%;  Score 25;  DB 17;  Length 25;
  Best Local Similarity   100.0%;  Pred. No. 2.1e+06;
  Matches   25;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy   1206 GCACCATTCTCATCAACCGGGTGCT 1230
          |||||||||||||||||||||||||
Db      1 GCACCATTCTCATCAACCGGGTGCT 25


RESULT 25
US-09-396-196G-67173
; Sequence 67173, Application US/09396196G
; GENERAL INFORMATION:
;  APPLICANT: Michael Mittmann
;  APPLICANT:  David Mack
;  APPLICANT:  David Lockhart
;  APPLICANT:  Affymetrix, Inc.
;  TITLE OF INVENTION: Methods of Genetic Analysis
;  FILE REFERENCE: 3101.1
;  CURRENT APPLICATION NUMBER: US/09/396,196G
;  CURRENT FILING DATE:  1999-09-15
;  PRIOR APPLICATION NUMBER: 60/100,678
;  PRIOR FILING DATE: 1998-09-17
;  NUMBER OF SEQ ID NOS: 127806
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 67173
;   LENGTH: 25
;   TYPE: DNA
;   ORGANISM: mus musculus
US-09-396-196G-67173

  Query Match             1.6%;  Score 25;  DB 17;  Length 25;
  Best Local Similarity   100.0%;  Pred. No. 2.1e+06;
  Matches   25;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy   1443 GCATCCACTGGTACTCGCAGCTGCT 1467
          |||||||||||||||||||||||||
Db      1 GCATCCACTGGTACTCGCAGCTGCT 25


Search completed: March 14, 2003, 01:02:17
Job time : 3791 secs
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GenCore version 5.1.4_p5_4578

OM nucleic - nucleic search, using sw model

Run on: March 13, 2003, 21:59:18 ; Search time 476 Seconds
(without alignments)
7520.095 Million cell updates/sec

Title: US-10-001-844-3
Perfect score: 1576
Sequence: 1 gcgaggcagccagcgaggga.....gaggggcgcgggaggggccc 1576

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 4665808 seqs, 1135648920 residues

Total number of hits satisfying chosen parameters: 7025612

Minimum DB seq length: 0
Maximum DB seq length: 50

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 1000 summaries

Database : Pending_Patents_NA_New:*
1: /cgn2_6/ptodata/1/pna/PCT_NEW_COMB.seq:*
2: /cgn2_6/ptodata/1/pna/US06_NEW_COMB.seq:*
3: /cgn2_6/ptodata/1/pna/US07_NEW_COMB.seq:*
4: /cgn2_6/ptodata/1/pna/US08_NEW_COMB.seq:*
5: /cgn2_6/ptodata/1/pna/US09_NEW_COMB.seq:*
6: /cgn2_6/ptodata/1/pna/US09_NEW_COMB.seq2:*
7: /cgn2_6/ptodata/1/pna/US10_NEW_COMB.seq:*
8: /cgn2_6/ptodata/1/pna/US10_NEW_COMB.seq2:*
9: /cgn2_6/ptodata/1/pna/US60_NEW_COMB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Result No.	Score	% Query Match	Length	DB	ID	Description
	1	30	1.9	30	8	US-10-001-844-6	Sequence 6, Appli
	2	26.4	1.7	44	7	US-10-287-787-7843	Sequence 7843, Ap
c	3	26	1.6	46	7	US-10-299-054A-10448	Sequence 10448, A
	4	25.6	1.6	43	7	US-10-299-054A-10430	Sequence 10430, A
	5	25.6	1.6	43	7	US-10-299-054A-10431	Sequence 10431, A
	6	25.6	1.6	43	7	US-10-299-054A-10449	Sequence 10449, A
	7	25.6	1.6	43	7	US-10-299-054A-10450	Sequence 10450, A
c	8	25.6	1.6	50	8	US-10-126-448-2	Sequence 2, Appli
c	9	25	1.6	25	8	US-10-303-778-10110	Sequence 10110, A
	10	25	1.6	25	9	US-60-427-808-296803	Sequence 296803,
	11	25	1.6	25	9	US-60-427-808-634065	Sequence 634065,
	12	25	1.6	25	9	US-60-427-836-454485	Sequence 454485,
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	34	22.8	1.4	48	7	US-10-299-054A-10634	Sequence 10634, A
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	38	22.6	1.4	46	7	US-10-299-054A-3300	Sequence 3300, Ap
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	40	22.6	1.4	50	6	US-09-912-293-18324	Sequence 18324, A
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	45	22.4	1.4	40	7	US-10-299-054A-10612	Sequence 10612, A
	46	22.4	1.4	40	7	US-10-299-054A-10613	Sequence 10613, A
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	78	21.4	1.4	45	8	US-10-015-610A-151	Sequence 151, App
	79	21.4	1.4	45	8	US-10-226-254A-151	Sequence 151, App
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	256	19.2	1.2	34	7	US-10-299-054A-3310
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	258	19.2	1.2	38	7	US-10-367-892-12802
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c	267	19.2	1.2	41	8	US-10-310-157-2531
	268	19.2	1.2	42	7	US-10-299-054A-10675
c	269	19.2	1.2	42	8	US-10-211-088-100
	270	19.2	1.2	44	8	US-10-316-956-236
c	271	19.2	1.2	45	7	US-10-367-892-21770
	272	19.2	1.2	46	7	US-10-287-787-12519
	273	19.2	1.2	47	7	US-10-299-054A-2372
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	275	19.2	1.2	48	7	US-10-299-054A-9830
c	276	19.2	1.2	48	7	US-10-299-054A-9831
c	277	19.2	1.2	48	7	US-10-287-787-11584
	278	19.2	1.2	49	7	US-10-367-892-20906
	279	19.2	1.2	50	6	US-09-912-293-234351
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	282	19	1.2	19	6	US-09-825-155A-5
	283	19	1.2	19	6	US-09-825-155A-9
c	284	19	1.2	19	8	US-10-303-778-3424
c	285	19	1.2	19	8	US-10-310-188-5772
	286	19	1.2	19	8	US-10-310-188-60793
c	287	19	1.2	29	7	US-10-299-054A-7038
	288	19	1.2	30	7	US-10-367-892-11708
	289	19	1.2	30	8	US-10-164-282-18
	290	19	1.2	33	7	US-10-299-054A-740
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	292	19	1.2	38	7	US-10-299-054A-2610
	293	19	1.2	38	7	US-10-299-054A-10480
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	296	19	1.2	39	7	US-10-299-054A-10479
	297	19	1.2	39	8	US-10-343-561-141
	298	19	1.2	40	1	PCT-US02-26708-53
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	304	19	1.2	40	8	US-10-224-683-53
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	309	19	1.2	42	7	US-10-367-892-6782
	310	19	1.2	43	7	US-10-299-054A-1757
	311	19	1.2	43	7	US-10-299-054A-3333
c	312	19	1.2	44	7	US-10-367-892-11650
	313	19	1.2	44	7	US-10-287-787-6829
	314	19	1.2	45	7	US-10-367-892-8798
	315	19	1.2	45	7	US-10-299-054A-329
	316	19	1.2	45	7	US-10-299-054A-4381

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	319	19	1.2	45	8	US-10-089-058A-60
	320	19	1.2	47	6	US-09-785-632B-7
	321	19	1.2	47	7	US-10-299-054A-10800
	322	19	1.2	47	7	US-10-299-054A-10806
	323	19	1.2	48	6	US-09-708-506A-16
	324	19	1.2	48	7	US-10-367-892-25020
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c	326	19	1.2	50	8	US-10-325-899-4902
	327	18.8	1.2	22	8	US-10-310-188-29562
	328	18.8	1.2	25	9	US-60-427-836-346047
	329	18.8	1.2	25	9	US-60-427-836-654281
c	330	18.8	1.2	30	7	US-10-367-892-18092
	331	18.8	1.2	32	7	US-10-299-054A-5501
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	333	18.8	1.2	33	7	US-10-299-054A-5500
	334	18.8	1.2	37	7	US-10-299-054A-3266
	335	18.8	1.2	38	7	US-10-299-054A-5201
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	338	18.8	1.2	39	8	US-10-305-275-1473
	339	18.8	1.2	39	8	US-10-305-275A-1473
	340	18.8	1.2	40	6	US-09-875-082-75
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c	348	18.8	1.2	42	1	PCT-US02-41414-946
	349	18.8	1.2	42	8	US-10-132-295-4
	350	18.8	1.2	42	8	US-10-209-208-65
	351	18.8	1.2	43	7	US-10-367-892-11913
	352	18.8	1.2	43	9	US-60-288-292-7836
	353	18.8	1.2	45	7	US-10-299-054A-5504
	354	18.8	1.2	45	7	US-10-299-054A-5505
	355	18.8	1.2	46	7	US-10-299-054A-3271
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	357	18.8	1.2	46	7	US-10-299-054A-4356
c	358	18.8	1.2	46	7	US-10-299-054A-10269
	359	18.8	1.2	46	7	US-10-287-787-13357
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	367	18.8	1.2	49	7	US-10-287-787-4251
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	371	18.8	1.2	50	8	US-10-325-899-4569
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	378	18.6	1.2	25	9	US-60-427-808-100049
	379	18.6	1.2	25	9	US-60-427-808-304565
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	381	18.6	1.2	25	9	US-60-427-808-623289
	382	18.6	1.2	25	9	US-60-427-808-872100
	383	18.6	1.2	25	9	US-60-427-808-876926
	384	18.6	1.2	25	9	US-60-427-836-81274
c	385	18.6	1.2	25	9	US-60-427-836-91724
	386	18.6	1.2	25	9	US-60-427-836-398939
	387	18.6	1.2	25	9	US-60-427-836-590246
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	403	18.6	1.2	41	1	PCT-US02-35375-33
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	405	18.6	1.2	41	7	US-10-299-054A-2224
	406	18.6	1.2	41	8	US-10-319-369-2
	407	18.6	1.2	42	7	US-10-299-054A-2494
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c	411	18.6	1.2	43	7	US-10-367-892-17749
	412	18.6	1.2	43	7	US-10-367-892-25041
	413	18.6	1.2	43	7	US-10-287-787-21378
c	414	18.6	1.2	44	7	US-10-299-054A-6131
	415	18.6	1.2	44	7	US-10-299-054A-11059
c	416	18.6	1.2	44	7	US-10-287-787-6829
	417	18.6	1.2	44	8	US-10-316-956-256
	418	18.6	1.2	45	6	US-09-906-777B-313
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	421	18.6	1.2	45	6	US-09-904-011C-313
	422	18.6	1.2	45	6	US-09-665-350B-313
	423	18.6	1.2	45	7	US-10-287-787-1205
	424	18.6	1.2	45	8	US-10-299-937-313
	425	18.6	1.2	45	8	US-10-299-976-313
	426	18.6	1.2	45	8	US-10-298-993-313
	427	18.6	1.2	46	7	US-10-299-054A-6233
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	433	18.6	1.2	49	7	US-10-299-054A-11058
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	436	18.6	1.2	50	7	US-10-299-054A-2880
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c	447	18.4	1.2	29	8	US-10-228-264-17
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	451	18.4	1.2	30	7	US-10-287-787-17084
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	453	18.4	1.2	32	7	US-10-299-054A-601
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c	456	18.4	1.2	36	7	US-10-299-054A-10364
	457	18.4	1.2	36	8	US-10-332-542-7
c	458	18.4	1.2	37	7	US-10-299-054A-8130
	459	18.4	1.2	37	7	US-10-299-054A-11191
	460	18.4	1.2	37	7	US-10-287-787-27647
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	466	18.4	1.2	44	7	US-10-299-054A-9578
	467	18.4	1.2	44	7	US-10-299-054A-9679
	468	18.4	1.2	44	7	US-10-299-054A-9680
c	469	18.4	1.2	44	7	US-10-299-054A-10684
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c	471	18.4	1.2	45	7	US-10-299-054A-6232
	472	18.4	1.2	46	6	US-09-770-169A-76
c	473	18.4	1.2	47	7	US-10-299-054A-8046
	474	18.4	1.2	47	7	US-10-299-054A-11262
c	475	18.4	1.2	47	7	US-10-287-787-4527
c	476	18.4	1.2	48	7	US-10-367-892-6684
	477	18.4	1.2	48	7	US-10-367-892-17619
	478	18.4	1.2	49	6	US-09-785-632B-8
c	479	18.4	1.2	49	7	US-10-299-054A-6930
c	480	18.4	1.2	50	6	US-09-912-293-120093
	481	18.4	1.2	50	6	US-09-912-293-229061
	482	18.4	1.2	50	7	US-10-287-787-11402
c	483	18.4	1.2	50	8	US-10-325-899-451
	484	18.4	1.2	50	8	US-10-325-899-6536
	485	18.4	1.2	50	8	US-10-325-899-6599
c	486	18.4	1.2	50	8	US-10-325-899-6926
c	487	18.4	1.2	50	8	US-10-325-899-6989
	488	18.4	1.2	50	8	US-10-325-899-7175
	489	18.2	1.2	23	8	US-10-310-188-35370
	490	18.2	1.2	24	8	US-10-310-188-67051
	491	18.2	1.2	24	8	US-10-310-188-74369
c	492	18.2	1.2	25	7	US-10-299-054A-7009
	493	18.2	1.2	25	7	US-10-299-054A-7010
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	831	17.6	1.1	49	8	US-10-316-954-2533
	832	17.6	1.1	50	6	US-09-912-293-151340
	833	17.6	1.1	50	6	US-09-912-293-206403
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	840	17.4	1.1	25	9	US-60-427-808-451372
	841	17.4	1.1	26	8	US-10-278-060-1
	842	17.4	1.1	27	7	US-10-299-054A-3145
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	853	17.4	1.1	32	7	US-10-367-892-14270
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	859	17.4	1.1	35	8	US-10-192-078-8
c	860	17.4	1.1	36	7	US-10-299-054A-1750
	861	17.4	1.1	36	8	US-10-185-815-67
c	862	17.4	1.1	37	6	US-09-848-868-15
	863	17.4	1.1	37	7	US-10-299-054A-9484
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	871	17.4	1.1	38	7	US-10-287-787-18576
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	889	17.4	1.1	42	8	US-10-316-956-240
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	897	17.4	1.1	45	7	US-10-299-054A-10821
	898	17.4	1.1	45	7	US-10-299-054A-10833
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	915	17.4	1.1	47	7	US-10-287-787-24713
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	921	17.4	1.1	49	7	US-10-367-892-19414
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	923	17.4	1.1	50	6	US-09-513-999C-15638
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	925	17.4	1.1	50	6	US-09-490-153-117
	926	17.4	1.1	50	6	US-09-912-293-49078
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	933	17.4	1.1	50	8	US-10-325-899-3562
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	935	17.4	1.1	50	8	US-10-325-899-6258
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	937	17.2	1.1	22	8	US-10-310-188-58413
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	968	17.2	1.1	25	9	US-60-427-808-665304
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c	970	17.2	1.1	25	9	US-60-427-836-184860
c	971	17.2	1.1	25	9	US-60-427-836-247311
c	972	17.2	1.1	25	9	US-60-427-836-289180
	973	17.2	1.1	25	9	US-60-427-836-346045

Sequence 10846, A
Sequence 10848, A
Sequence 19197, A
Sequence 3283, Ap
Sequence 9593, Ap
Sequence 20535, A
Sequence 25024, A
Sequence 15747, A
Sequence 2372, Ap
Sequence 8046, Ap
Sequence 9816, Ap
Sequence 6060, Ap
Sequence 7518, Ap
Sequence 18121, A
Sequence 24713, A
Sequence 3847, Ap
Sequence 10, Appl
Sequence 16488, A
Sequence 26979, A
Sequence 8, Appli
Sequence 19414, A
Sequence 15423, A
Sequence 15638, A
Sequence 23, Appl
Sequence 117, App
Sequence 49078, A
Sequence 85925, A
Sequence 9707, Ap
Sequence 32, Appl
Sequence 33, Appl
Sequence 1357, Ap
Sequence 2488, Ap
Sequence 3562, Ap
Sequence 3779, Ap
Sequence 6258, Ap
Sequence 29465, A
Sequence 58413, A
Sequence 60588, A
Sequence 60894, A
Sequence 29478, A
Sequence 49888, A
Sequence 12, Appl
Sequence 6811, Ap
Sequence 17317, A
Sequence 15480, A
Sequence 29553, A
Sequence 41628, A
Sequence 70671, A
Sequence 12, Appl
Sequence 21387, A
Sequence 118079,
Sequence 123028,
Sequence 136971,
Sequence 114707,
Sequence 361802,
Sequence 574883,
Sequence 601568,
Sequence 618769,
Sequence 683836,
Sequence 120038,
Sequence 120039,
Sequence 120045,
Sequence 120046,
Sequence 164185,
Sequence 323982,
Sequence 323983,
Sequence 392595,
Sequence 665304,
Sequence 181306,
Sequence 184860,
Sequence 247311,
Sequence 289180,
Sequence 346045,

974	17.2	1.1	25	9	US-60-427-836-399282	Sequence 399282,
c 975	17.2	1.1	25	9	US-60-427-836-652973	Sequence 652973,
976	17.2	1.1	25	9	US-60-427-836-653150	Sequence 653150,
977	17.2	1.1	25	9	US-60-427-836-654282	Sequence 654282,
978	17.2	1.1	25	9	US-60-427-836-663449	Sequence 663449,
c 979	17.2	1.1	30	7	US-10-367-892-21796	Sequence 21796, A
980	17.2	1.1	30	7	US-10-299-054A-608	Sequence 608, App
c 981	17.2	1.1	30	7	US-10-299-054A-649	Sequence 649, App
982	17.2	1.1	30	7	US-10-299-054A-4199	Sequence 4199, Ap
983	17.2	1.1	30	7	US-10-299-054A-8978	Sequence 8978, Ap
c 984	17.2	1.1	30	7	US-10-299-054A-10856	Sequence 10856, A
985	17.2	1.1	30	7	US-10-287-787-12674	Sequence 12674, A
c 986	17.2	1.1	30	7	US-10-287-787-14195	Sequence 14195, A
987	17.2	1.1	30	7	US-10-287-787-14822	Sequence 14822, A
988	17.2	1.1	30	7	US-10-287-787-16473	Sequence 16473, A
c 989	17.2	1.1	30	8	US-10-316-954-4456	Sequence 4456, Ap
990	17.2	1.1	30	8	US-10-314-578-1097	Sequence 1097, Ap
c 991	17.2	1.1	30	8	US-10-314-578-1097	Sequence 1097, Ap
c 992	17.2	1.1	31	7	US-10-367-892-7821	Sequence 7821, Ap
993	17.2	1.1	31	7	US-10-299-054A-3456	Sequence 3456, Ap
994	17.2	1.1	32	7	US-10-367-892-4362	Sequence 4362, Ap
c 995	17.2	1.1	32	7	US-10-287-787-13994	Sequence 13994, A
c 996	17.2	1.1	33	1	PCT-US02-24274-11	Sequence 11, Appl
997	17.2	1.1	33	7	US-10-287-787-19712	Sequence 19712, A
998	17.2	1.1	34	7	US-10-287-787-10660	Sequence 10660, A
c 999	17.2	1.1	35	7	US-10-367-892-964	Sequence 964, App
1000	17.2	1.1	37	7	US-10-287-787-8179	Sequence 8179, Ap

ALIGNMENTS

```
RESULT 1
US-10-001-844-6
; Sequence 6, Application US/10001844
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Lex M. Cowsert
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SHH EXPRESSION
;  FILE REFERENCE: ISPH-0617
;  CURRENT APPLICATION NUMBER: US/10/001,844
;  CURRENT FILING DATE:  2001-11-16
;  NUMBER OF SEQ ID NOS: 49
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 6
;   LENGTH: 30
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: PCR Probe
US-10-001-844-6

  Query Match             1.9%;  Score 30;  DB 8;  Length 30;
  Best Local Similarity   100.0%;  Pred. No. 1.4e+04;
  Matches   30;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy     691 TATCCACTGCTCGGTGAAAGCAGAGAACTC 720
           ||||||||||||||||||||||||||||||
Db       1 TATCCACTGCTCGGTGAAAGCAGAGAACTC 30


RESULT 2
US-10-287-787-7843
; Sequence 7843, Application US/10287787
; GENERAL INFORMATION:
;  APPLICANT: Feldmann, Richard J.; Global Determinants, Inc.
;  TITLE OF INVENTION: Caulobacter crescentus complete genome.
;  FILE REFERENCE: Jim Zegeer Law Offices - 703-684-8333
;  CURRENT APPLICATION NUMBER: US/10/287,787
;  CURRENT FILING DATE:  2003-03-03
;  NUMBER OF SEQ ID NOS: 27958
;  SOFTWARE: Proprietary
; SEQ ID NO 7843
;   LENGTH: 44
;   TYPE: DNA
;   ORGANISM: Caulobacter crescentus complete genome.
;   FEATURE:
;   LOCATION: (1052967)...(1053010)
;   OTHER INFORMATION: Chromosome = 1  Strand = positive  ConnectronObjectNumber =
US-10-287-787-7843

  Query Match             1.7%;  Score 26.4;  DB 7;  Length 44;
  Best Local Similarity   75.0%;  Pred. No. 5.9e+04;
  Matches   33;  Conservative    0;  Mismatches   11;  Indels    0;  Gaps    0;

Qy    1351 CAGCGGCGGCGGGGACCGCGGGGGCGGCGGCGGCAGAGTAGCCC 1394
           | ||| ||||| ||||| ||| ||||||||||| ||   | | ||
Db       1 CTGCGCCGGCGCGGACCTCGGCGGCGGCGGCGCCACCTTCGACC 44


RESULT 3
US-10-299-054A-10448/c
; Sequence 10448, Application US/10299054A
; GENERAL INFORMATION:
;  APPLICANT: Feldmann, Richard J.; Global Determinants, Inc.
;  TITLE OF INVENTION: Mycobacterium tuberculosis complete genome.
;  FILE REFERENCE: Jim Zegeer Law Offices - 703-684-8333
;  CURRENT APPLICATION NUMBER: US/10/299,054A
;  CURRENT FILING DATE:  2003-03-03
;  NUMBER OF SEQ ID NOS: 11910
;  SOFTWARE: Proprietary
; SEQ ID NO 10448
;   LENGTH: 46
;   TYPE: DNA
;   ORGANISM: Mycobacterium tuberculosis complete genome.
;   FEATURE:
;   LOCATION: (3933994)...(3934039)
;   OTHER INFORMATION: Chromosome = 1  Strand = negative  ConnectronObjectNumber = 1
US-10-299-054A-10448

  Query Match             1.6%;  Score 26;  DB 7;  Length 46;
  Best Local Similarity   76.2%;  Pred. No. 7e+04;
  Matches   32;  Conservative    0;  Mismatches   10;  Indels    0;  Gaps    0;

Qy    1337 GACCGCGGCGGGGACAGCGGCGGCGGGGACCGCGGGGGCGGC 1378
           | ||||||||| ||| |||||| |||| | ||||   ||||
Db      45 GGCCGCGGCGGTGACGGCGGCGATGGGGCCAGCGGTCTCGGC 4


RESULT 4
US-10-299-054A-10430
; Sequence 10430, Application US/10299054A
; GENERAL INFORMATION:
;  APPLICANT: Feldmann, Richard J.; Global Determinants, Inc.
;  TITLE OF INVENTION: Mycobacterium tuberculosis complete genome.
;  FILE REFERENCE: Jim Zegeer Law Offices - 703-684-8333
;  CURRENT APPLICATION NUMBER: US/10/299,054A
;  CURRENT FILING DATE:  2003-03-03
;  NUMBER OF SEQ ID NOS: 11910
;  SOFTWARE: Proprietary
; SEQ ID NO 10430
;   LENGTH: 43
;   TYPE: DNA
;   ORGANISM: Mycobacterium tuberculosis complete genome.
;   FEATURE:
;   LOCATION: (3933394)...(3933436)
;   OTHER INFORMATION: Chromosome = 1  Strand = positive  ConnectronObjectNumber =
US-10-299-054A-10430

  Query Match             1.6%;  Score 25.6;  DB 7;  Length 43;
  Best Local Similarity   77.5%;  Pred. No. 8.1e+04;
  Matches   31;  Conservative    0;  Mismatches    9;  Indels    0;  Gaps    0;

Qy    1339 CCGCGGCGGGGACAGCGGCGGCGGGGACCGCGGGGGCGGC 1378
           ||||||||| ||| |||||| |||| | ||||   ||||
Db       1 CCGCGGCGGTGACGGCGGCGATGGGGCCAGCGGTCTCGGC 40
```

```
RESULT 5
US-10-299-054A-10431
; Sequence 10431, Application US/10299054A
; GENERAL INFORMATION:
;  APPLICANT: Feldmann, Richard J.; Global Determinants, Inc.
;  TITLE OF INVENTION: Mycobacterium tuberculosis complete genome.
;  FILE REFERENCE: Jim Zegeer Law Offices - 703-684-8333
;  CURRENT APPLICATION NUMBER: US/10/299,054A
;  CURRENT FILING DATE:  2003-03-03
;  NUMBER OF SEQ ID NOS: 11910
;  SOFTWARE: Proprietary
; SEQ ID NO 10431
;   LENGTH: 43
;   TYPE: DNA
;   ORGANISM: Mycobacterium tuberculosis complete genome.
;   FEATURE:
;   LOCATION: (3933394)...(3933436)
;   OTHER INFORMATION: Chromosome = 1  Strand = positive  ConnectronObjectNumber = 12507
US-10-299-054A-10431

  Query Match             1.6%;  Score 25.6;  DB 7;  Length 43;
  Best Local Similarity   77.5%;  Pred. No. 8.1e+04;
  Matches   31;  Conservative    0;  Mismatches    9;  Indels    0;  Gaps    0;

Qy   1339 CCGCGGCGGGGACAGCGGCGGCGGGGACCGCGGGGGCGGC 1378
           ||||||||| ||| ||||||  |||| | ||||   ||||
Db      1 CCGCGGCGGTGACGGCGGCGATGGGGCCAGCGGTCTCGGC 40


RESULT 6
US-10-299-054A-10449
; Sequence 10449, Application US/10299054A
; GENERAL INFORMATION:
;  APPLICANT: Feldmann, Richard J.; Global Determinants, Inc.
;  TITLE OF INVENTION: Mycobacterium tuberculosis complete genome.
;  FILE REFERENCE: Jim Zegeer Law Offices - 703-684-8333
;  CURRENT APPLICATION NUMBER: US/10/299,054A
;  CURRENT FILING DATE:  2003-03-03
;  NUMBER OF SEQ ID NOS: 11910
;  SOFTWARE: Proprietary
; SEQ ID NO 10449
;   LENGTH: 43
;   TYPE: DNA
;   ORGANISM: Mycobacterium tuberculosis complete genome.
;   FEATURE:
;   LOCATION: (3933997)...(3934039)
;   OTHER INFORMATION: Chromosome = 1  Strand = positive  ConnectronObjectNumber = 12527
US-10-299-054A-10449

  Query Match             1.6%;  Score 25.6;  DB 7;  Length 43;
  Best Local Similarity   77.5%;  Pred. No. 8.1e+04;
  Matches   31;  Conservative    0;  Mismatches    9;  Indels    0;  Gaps    0;

Qy   1339 CCGCGGCGGGGACAGCGGCGGCGGGGACCGCGGGGGCGGC 1378
           ||||||||| ||| ||||||  |||| | ||||   ||||
Db      1 CCGCGGCGGTGACGGCGGCGATGGGGCCAGCGGTCTCGGC 40


RESULT 7
US-10-299-054A-10450
; Sequence 10450, Application US/10299054A
; GENERAL INFORMATION:
;  APPLICANT: Feldmann, Richard J.; Global Determinants, Inc.
;  TITLE OF INVENTION: Mycobacterium tuberculosis complete genome.
;  FILE REFERENCE: Jim Zegeer Law Offices - 703-684-8333
;  CURRENT APPLICATION NUMBER: US/10/299,054A
;  CURRENT FILING DATE:  2003-03-03
;  NUMBER OF SEQ ID NOS: 11910
;  SOFTWARE: Proprietary
; SEQ ID NO 10450
;   LENGTH: 43
;   TYPE: DNA
;   ORGANISM: Mycobacterium tuberculosis complete genome.
;   FEATURE:
;   LOCATION: (3933997)...(3934039)
;   OTHER INFORMATION: Chromosome = 1  Strand = positive  ConnectronObjectNumber =
US-10-299-054A-10450

  Query Match             1.6%;  Score 25.6;  DB 7;  Length 43;
  Best Local Similarity   77.5%;  Pred. No. 8.1e+04;
  Matches   31;  Conservative    0;  Mismatches    9;  Indels    0;  Gaps    0;

Qy   1339 CCGCGGCGGGGACAGCGGCGGCGGGGACCGCGGGGGCGGC 1378
           ||||||||| ||| ||||||  |||| | ||||   ||||
Db      1 CCGCGGCGGTGACGGCGGCGATGGGGCCAGCGGTCTCGGC 40


RESULT 8
US-10-126-448-2/c
; Sequence 2, Application US/10126448
; GENERAL INFORMATION:
;  APPLICANT: Doring, Volker
;  APPLICANT:  Nangle, Leslie A.
;  APPLICANT:  Hendrickson, Tamara L.
;  APPLICANT:  de Crecy-Lagard, Valerie
;  APPLICANT:  Schimmel, Paul
;  APPLICANT:  Marliere, Philippe
;  TITLE OF INVENTION: Method for Diversifying the Chemical
;  TITLE OF INVENTION:  Composition of Proteins Produced in vivo by Genetically
;  TITLE OF INVENTION:  Disabling the Editing Function of their Aminoacyl tRNA
;  TITLE OF INVENTION:  Synthetases
;  FILE REFERENCE: CABI-004
;  CURRENT APPLICATION NUMBER: US/10/126,448
;  CURRENT FILING DATE:  2002-04-19
;  PRIOR APPLICATION NUMBER: US 60/285,495
;  PRIOR FILING DATE: 2001-04-19
;  NUMBER OF SEQ ID NOS: 6
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 2
;   LENGTH: 50
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: synthetic oligonucleotide
;   FEATURE:
;   NAME/KEY: misc_feature
;   LOCATION: 1
;   OTHER INFORMATION: N = phosphorylated cytidine
US-10-126-448-2

  Query Match             1.6%;  Score 25.6;  DB 8;  Length 50;
  Best Local Similarity   87.5%;  Pred. No. 8.2e+04;
  Matches   28;  Conservative    0;  Mismatches    4;  Indels    0;  Gaps    0;

Qy   1353 GCGGCGGCGGGGACCGCGGGGGCGGCGGCGGC 1384
           |||||||||| | | |||| ||||||||||||
Db     45 GCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGC 14


RESULT 9
US-10-303-778-10110/c
; Sequence 10110, Application US/10303778
; GENERAL INFORMATION:
;  APPLICANT: RosettaGenomics
;  TITLE OF INVENTION: BIOINFORMATICALLY DETECTABLE GROUP OF NOVEL VIRAL
;  TITLE OF INVENTION:  REGULATORY GENES AND USES THEREOF
;  FILE REFERENCE: 47416
;  CURRENT APPLICATION NUMBER: US/10/303,778
;  CURRENT FILING DATE:  2002-11-26
;  NUMBER OF SEQ ID NOS: 17608
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 10110
;   LENGTH: 25
;   TYPE: DNA
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```
;   ORGANISM: Homo sapiens
US-10-303-778-10110

  Query Match             1.6%;  Score 25;  DB 8;  Length 25;
  Best Local Similarity   100.0%;  Pred. No. 9.8e+04;
  Matches   25;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    1551 CCGGGGGAGGGGCGCGGGAGGGGGC 1575
           |||||||||||||||||||||||||
Db      25 CCGGGGGAGGGGCGCGGGAGGGGGC 1


RESULT 10
US-60-427-808-296803
; Sequence 296803, Application US/60427808
; GENERAL INFORMATION:
;  APPLICANT: Xue Mei Zhou
;  TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
;  FILE REFERENCE: 3528
;  CURRENT APPLICATION NUMBER: US/60/427,808
;  CURRENT FILING DATE:  2002-11-20
;  NUMBER OF SEQ ID NOS: 982914
;  SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 296803
;   LENGTH: 25
;   TYPE: DNA
;   ORGANISM: Mus musculus
US-60-427-808-296803

  Query Match             1.6%;  Score 25;  DB 9;  Length 25;
  Best Local Similarity   100.0%;  Pred. No. 9.8e+04;
  Matches   25;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy     895 CAAGAAGGTCTTCTACGTGATCGAG 919
           |||||||||||||||||||||||||
Db       1 CAAGAAGGTCTTCTACGTGATCGAG 25


RESULT 11
US-60-427-808-634065
; Sequence 634065, Application US/60427808
; GENERAL INFORMATION:
;  APPLICANT: Xue Mei Zhou
;  TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
;  FILE REFERENCE: 3528
;  CURRENT APPLICATION NUMBER: US/60/427,808
;  CURRENT FILING DATE:  2002-11-20
;  NUMBER OF SEQ ID NOS: 982914
;  SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 634065
;   LENGTH: 25
;   TYPE: DNA
;   ORGANISM: Mus musculus
US-60-427-808-634065

  Query Match             1.6%;  Score 25;  DB 9;  Length 25;
  Best Local Similarity   100.0%;  Pred. No. 9.8e+04;
  Matches   25;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    1441 GGGCATCCACTGGTACTCGCAGCTG 1465
           |||||||||||||||||||||||||
Db       1 GGGCATCCACTGGTACTCGCAGCTG 25


RESULT 12
US-60-427-836-454485
; Sequence 454485, Application US/60427836
; GENERAL INFORMATION:
;  APPLICANT: Xue Mei Zhou
;  TITLE OF INVENTION: Methods of Genetic Analysis of Rat
;  FILE REFERENCE: 3527
;  CURRENT APPLICATION NUMBER: US/60/427,836
;  CURRENT FILING DATE:  2002-11-20
;  NUMBER OF SEQ ID NOS: 699466
;  SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 454485
;   LENGTH: 25
;   TYPE: DNA
;   ORGANISM: Rattus norvegicus
US-60-427-836-454485

  Query Match             1.6%;  Score 25;  DB 9;  Length 25;
  Best Local Similarity   100.0%;  Pred. No. 9.8e+04;
  Matches   25;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    1441 GGGCATCCACTGGTACTCGCAGCTG 1465
           |||||||||||||||||||||||||
Db       1 GGGCATCCACTGGTACTCGCAGCTG 25


RESULT 13
US-09-912-293-16672
; Sequence 16672, Application US/09912293
; GENERAL INFORMATION:
;  APPLICANT: Rosen, et. al.
;  TITLE OF INVENTION: Human Genes, Sequences, and Expression Products 100
;  FILE REFERENCE: PO-100
;  CURRENT APPLICATION NUMBER: US/09/912,293
;  CURRENT FILING DATE:  2001-07-26
;  PRIOR APPLICATION NUMBER: 08/103,744
;  PRIOR FILING DATE: 1993-08-09
;  PRIOR APPLICATION NUMBER: 09/249,651
;  PRIOR FILING DATE: 1999-02-12
;  PRIOR APPLICATION NUMBER: 08/104,507
;  PRIOR FILING DATE: 1993-08-09
;  PRIOR APPLICATION NUMBER: 08/196,363
;  PRIOR FILING DATE: 1994-02-15
;  PRIOR APPLICATION NUMBER: 09/859,490
;  PRIOR FILING DATE: 2001-05-18
;  PRIOR APPLICATION NUMBER: 08/196,362
;  PRIOR FILING DATE: 1994-02-15
;  PRIOR APPLICATION NUMBER: 08/221,623
;  PRIOR FILING DATE: 1994-03-31
;  PRIOR APPLICATION NUMBER: 08/220,691
;  PRIOR FILING DATE: 1994-03-31
;  PRIOR APPLICATION NUMBER: 09/741,830
;  PRIOR FILING DATE: 2000-12-22
;  PRIOR APPLICATION NUMBER: 09/813,155
;  PRIOR FILING DATE: 2001-03-21
;  Remaining Prior Application data removed - See File Wrapper or PALM.
;  NUMBER OF SEQ ID NOS: 244538
; SEQ ID NO 16672
;   LENGTH: 50
;   TYPE: DNA
;   ORGANISM: Homo sapiens
;   FEATURE:
;   NAME/KEY: misc_feature
;   LOCATION: (50)..(50)
;   OTHER INFORMATION: n is equal to a,t,g, or c
US-09-912-293-16672

  Query Match             1.6%;  Score 25;  DB 6;  Length 50;
  Best Local Similarity   69.4%;  Pred. No. 1e+05;
  Matches   34;  Conservative    0;  Mismatches   15;  Indels    0;  Gaps    0;

Qy       5 GGCAGCCAGCGAGGGAGAGAGCGAGCGGGCGAGCCGGAGCGAGGAAGGG 53
           |||||  || ||| ||||||| ||| | | |||   ||| |||  || |
Db       1 GGCAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 49


RESULT 14
US-10-351-951-54
; Sequence 54, Application US/10351951
; GENERAL INFORMATION:
;  APPLICANT: Stefansson, Stefan E.
;  TITLE OF INVENTION: GENE LINKED TO OSTEOARTHRITIS
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```
;  FILE REFERENCE: 2345.2043-004
;  CURRENT APPLICATION NUMBER: US/10/351,951
;  CURRENT FILING DATE:  2003-01-24
;  PRIOR APPLICATION NUMBER: 10/057,312
;  PRIOR FILING DATE: 2002-01-25
;  PRIOR APPLICATION NUMBER: 60/431,538
;  PRIOR FILING DATE: 2002-12-05
;  NUMBER OF SEQ ID NOS: 132
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 54
;   LENGTH: 50
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-351-951-54

  Query Match             1.5%;  Score 24.4;  DB 8;  Length 50;
  Best Local Similarity   68.0%;  Pred. No. 1.3e+05;
  Matches   34;  Conservative    0;  Mismatches   16;  Indels    0;  Gaps    0;

Qy   1310 CTGGCTGCACTGGCGCCCGCGCGCACGGACCGCGGCGGGGACAGCGGCGG 1359
          | ||| |  ||||||| || |  | |||  || ||||||| | | ||| |
Db      1 CGGGCCGGCCTGGCGCTCGAGGCCCCGGGGCGGGGCGGGGCCCGAGGCCG 50


RESULT 15
US-09-711-724A-43
; Sequence 43, Application US/09711724A
; GENERAL INFORMATION:
;  APPLICANT: Ingham et al.
;  TITLE OF INVENTION: SCREENING ASSAYS FOR HEDGEHOG AGONISTS AND ANTAGONISTS
;  FILE REFERENCE: HMSU-P14-006
;  CURRENT APPLICATION NUMBER: US/09/711,724A
;  CURRENT FILING DATE:  2000-11-13
;  PRIOR APPLICATION NUMBER: 08/674509
;  PRIOR FILING DATE: 1996-07-07
;  NUMBER OF SEQ ID NOS: 54
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 43
;   LENGTH: 24
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: primer
US-09-711-724A-43

  Query Match             1.5%;  Score 24;  DB 6;  Length 24;
  Best Local Similarity   100.0%;  Pred. No. 1.4e+05;
  Matches   24;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    524 ACCGAGGGCTGGGACGAAGATGGC 547
          ||||||||||||||||||||||||
Db      1 ACCGAGGGCTGGGACGAAGATGGC 24


RESULT 16
US-60-427-808-121712
; Sequence 121712, Application US/60427808
; GENERAL INFORMATION:
;  APPLICANT: Xue Mei Zhou
;  TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
;  FILE REFERENCE: 3528
;  CURRENT APPLICATION NUMBER: US/60/427,808
;  CURRENT FILING DATE:  2002-11-20
;  NUMBER OF SEQ ID NOS: 982914
;  SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 121712
;   LENGTH: 25
;   TYPE: DNA
;   ORGANISM: Mus musculus
US-60-427-808-121712

  Query Match             1.5%;  Score 23.4;  DB 9;  Length 25;
  Best Local Similarity   96.0%;  Pred. No. 1.8e+05;
  Matches   24;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy   1203 AGGGCACCATTCTCATCAACCGGGT 1227
          | |||||||||||||||||||||||
Db      1 ACGGCACCATTCTCATCAACCGGGT 25


RESULT 17
US-60-427-808-296804
; Sequence 296804, Application US/60427808
; GENERAL INFORMATION:
;  APPLICANT: Xue Mei Zhou
;  TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
;  FILE REFERENCE: 3528
;  CURRENT APPLICATION NUMBER: US/60/427,808
;  CURRENT FILING DATE:  2002-11-20
;  NUMBER OF SEQ ID NOS: 982914
;  SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 296804
;   LENGTH: 25
;   TYPE: DNA
;   ORGANISM: Mus musculus
US-60-427-808-296804

  Query Match             1.5%;  Score 23.4;  DB 9;  Length 25;
  Best Local Similarity   96.0%;  Pred. No. 1.8e+05;
  Matches   24;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy    895 CAAGAAGGTCTTCTACGTGATCGAG 919
          ||||||||||||| |||||||||||||
Db      1 CAAGAAGGTCTTGTACGTGATCGAG 25


RESULT 18
US-60-427-808-634064
; Sequence 634064, Application US/60427808
; GENERAL INFORMATION:
;  APPLICANT: Xue Mei Zhou
;  TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
;  FILE REFERENCE: 3528
;  CURRENT APPLICATION NUMBER: US/60/427,808
;  CURRENT FILING DATE:  2002-11-20
;  NUMBER OF SEQ ID NOS: 982914
;  SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 634064
;   LENGTH: 25
;   TYPE: DNA
;   ORGANISM: Mus musculus
US-60-427-808-634064

  Query Match             1.5%;  Score 23.4;  DB 9;  Length 25;
  Best Local Similarity   96.0%;  Pred. No. 1.8e+05;
  Matches   24;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy   1441 GGGCATCCACTGGTACTCGCAGCTG 1465
          ||||||||||||| |||||||||||||
Db      1 GGGCATCCACTGCTACTCGCAGCTG 25


RESULT 19
US-60-427-808-765746
; Sequence 765746, Application US/60427808
; GENERAL INFORMATION:
;  APPLICANT: Xue Mei Zhou
;  TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
;  FILE REFERENCE: 3528
;  CURRENT APPLICATION NUMBER: US/60/427,808
;  CURRENT FILING DATE:  2002-11-20
;  NUMBER OF SEQ ID NOS: 982914
;  SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 765746
;   LENGTH: 25
;   TYPE: DNA
```

```
;   ORGANISM: Mus musculus
US-60-427-808-765746

  Query Match              1.5%;  Score 23.4;  DB 9;  Length 25;
  Best Local Similarity   96.0%;  Pred. No. 1.8e+05;
  Matches   24;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy     908 TACGTGATCGAGACGCGGGAGCCGC 932
           ||||||||||||||| ||||||||
Db       1 TACGTGATCGAGACGCTGGAGCCGC 25


RESULT 20
US-60-427-808-807373
; Sequence 807373, Application US/60427808
; GENERAL INFORMATION:
;  APPLICANT: Xue Mei Zhou
;  TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
;  FILE REFERENCE: 3528
;  CURRENT APPLICATION NUMBER: US/60/427,808
;  CURRENT FILING DATE:  2002-11-20
;  NUMBER OF SEQ ID NOS: 982914
;  SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 807373
;   LENGTH: 25
;   TYPE: DNA
;   ORGANISM: Mus musculus
US-60-427-808-807373

  Query Match              1.5%;  Score 23.4;  DB 9;  Length 25;
  Best Local Similarity   96.0%;  Pred. No. 1.8e+05;
  Matches   24;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy    1248 TCATCGAGGAGCACAGCTGGGCGCA 1272
           ||||||||||||||||||||| ||
Db       1 TCATCGAGGAGCACAGCTGGGCACA 25


RESULT 21
US-60-427-808-879497
; Sequence 879497, Application US/60427808
; GENERAL INFORMATION:
;  APPLICANT: Xue Mei Zhou
;  TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
;  FILE REFERENCE: 3528
;  CURRENT APPLICATION NUMBER: US/60/427,808
;  CURRENT FILING DATE:  2002-11-20
;  NUMBER OF SEQ ID NOS: 982914
;  SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 879497
;   LENGTH: 25
;   TYPE: DNA
;   ORGANISM: Mus musculus
US-60-427-808-879497

  Query Match              1.5%;  Score 23.4;  DB 9;  Length 25;
  Best Local Similarity   96.0%;  Pred. No. 1.8e+05;
  Matches   24;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy     876 TGGACCGCGACGACGGCGCCAAGAA 900
           ||||||||||||| ||||||||||
Db       1 TGGACCGCGACGAAGGCGCCAAGAA 25


RESULT 22
US-60-427-836-90500
; Sequence 90500, Application US/60427836
; GENERAL INFORMATION:
;  APPLICANT: Xue Mei Zhou
;  TITLE OF INVENTION: Methods of Genetic Analysis of Rat
;  FILE REFERENCE: 3527
;  CURRENT APPLICATION NUMBER: US/60/427,836
;  CURRENT FILING DATE:  2002-11-20
;  NUMBER OF SEQ ID NOS: 699466
;  SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 90500
;   LENGTH: 25
;   TYPE: DNA
;   ORGANISM: Rattus norvegicus
US-60-427-836-90500

  Query Match              1.5%;  Score 23.4;  DB 9;  Length 25;
  Best Local Similarity   96.0%;  Pred. No. 1.8e+05;
  Matches   24;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy    1203 AGGGCACCATTCTCATCAACCGGGT 1227
           | ||||||||||||||||||||||||
Db       1 ACGGCACCATTCTCATCAACCGGGT 25


RESULT 23
US-60-427-836-238304
; Sequence 238304, Application US/60427836
; GENERAL INFORMATION:
;  APPLICANT: Xue Mei Zhou
;  TITLE OF INVENTION: Methods of Genetic Analysis of Rat
;  FILE REFERENCE: 3527
;  CURRENT APPLICATION NUMBER: US/60/427,836
;  CURRENT FILING DATE:  2002-11-20
;  NUMBER OF SEQ ID NOS: 699466
;  SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 238304
;   LENGTH: 25
;   TYPE: DNA
;   ORGANISM: Rattus norvegicus
US-60-427-836-238304

  Query Match              1.5%;  Score 23.4;  DB 9;  Length 25;
  Best Local Similarity   96.0%;  Pred. No. 1.8e+05;
  Matches   24;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy    1249 CATCGAGGAGCACAGCTGGGCGCAC 1273
           ||||||||||||||||||||| |||
Db       1 CATCGAGGAGCACAGCTGGGCACAC 25


RESULT 24
US-60-427-836-454484
; Sequence 454484, Application US/60427836
; GENERAL INFORMATION:
;  APPLICANT: Xue Mei Zhou
;  TITLE OF INVENTION: Methods of Genetic Analysis of Rat
;  FILE REFERENCE: 3527
;  CURRENT APPLICATION NUMBER: US/60/427,836
;  CURRENT FILING DATE:  2002-11-20
;  NUMBER OF SEQ ID NOS: 699466
;  SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 454484
;   LENGTH: 25
;   TYPE: DNA
;   ORGANISM: Rattus norvegicus
US-60-427-836-454484

  Query Match              1.5%;  Score 23.4;  DB 9;  Length 25;
  Best Local Similarity   96.0%;  Pred. No. 1.8e+05;
  Matches   24;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy    1441 GGGCATCCACTGGTACTCGCAGCTG 1465
           ||||||||||||| ||||||||||||
Db       1 GGGCATCCACTGCTACTCGCAGCTG 25


RESULT 25
US-60-427-836-591791
; Sequence 591791, Application US/60427836
; GENERAL INFORMATION:
```

; APPLICANT: Xue Mei Zhou
; TITLE OF INVENTION: Methods of Genetic Analysis of Rat
; FILE REFERENCE: 3527
; CURRENT APPLICATION NUMBER: US/60/427,836
; CURRENT FILING DATE: 2002-11-20
; NUMBER OF SEQ ID NOS: 699466
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 591791
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Rattus norvegicus
US-60-427-836-591791

Query Match 1.5%; Score 23.4; DB 9; Length 25;
Best Local Similarity 96.0%; Pred. No. 1.8e+05;
Matches 24; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```
Qy    1235 TCGTGCTACGCGGTCATCGAGGAGC 1259
           ||||||||||| ||||||||||||
Db       1 TCGTGCTACGCAGTCATCGAGGAGC 25
```

Search completed: March 14, 2003, 01:10:16
Job time : 506 secs

GenCore version 5.1.4_p5_4578

OM nucleic - nucleic search, using sw model

Run on: March 13, 2003, 20:53:08 ; Search time 4362 Seconds
(without alignments)
10514.906 Million cell updates/sec

Title: US-10-001-844-3
Perfect score: 1576
Sequence: 1 gcgaggcagccagcgaggga.....gaggggcgcgggaggggcc 1576

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 2054640 seqs, 14551402878 residues

Total number of hits satisfying chosen parameters: 841850

Minimum DB seq length: 0
Maximum DB seq length: 50

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 1000 summaries

Database :
GenEmbl:*
1: gb_ba:*
2: gb_htg:*
3: gb_in:*
4: gb_om:*
5: gb_ov:*
6: gb_pat:*
7: gb_ph:*
8: gb_pl:*
9: gb_pr:*
10: gb_ro:*
11: gb_sts:*
12: gb_sy:*
13: gb_un:*
14: gb_vi:*
15: em_ba:*
16: em_fun:*
17: em_hum:*
18: em_in:*
19: em_mu:*
20: em_om:*
21: em_or:*
22: em_ov:*
23: em_pat:*
24: em_ph:*
25: em_pl:*
26: em_ro:*
27: em_sts:*
28: em_un:*
29: em_vi:*
30: em_htg_hum:*
31: em_htg_inv:*
32: em_htg_other:*
33: em_htg_mus:*
34: em_htg_pln:*
35: em_htg_rod:*
36: em_htg_mam:*
37: em_htg_vrt:*
38: em_sy:*
39: em_htgo_hum:*
40: em_htgo_mus:*
41: em_htgo_other:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.		Score	% Query Match	Length	DB	ID	Description
c	1	50	3.2	50	6	AX146582	AX146582 Sequence
c	2	48.4	3.1	50	6	AX146613	AX146613 Sequence
c	3	48.4	3.1	50	6	AX146614	AX146614 Sequence
c	4	45.2	2.9	50	6	AX146616	AX146616 Sequence
	5	43.8	2.8	47	6	AX146608	AX146608 Sequence
	6	43.8	2.8	47	6	AX146609	AX146609 Sequence
	7	43.4	2.8	45	6	AX146612	AX146612 Sequence
c	8	42	2.7	50	6	AX146615	AX146615 Sequence
c	9	41.4	2.6	43	6	AX146617	AX146617 Sequence
	10	40.6	2.6	47	6	AX146611	AX146611 Sequence
	11	37.4	2.4	47	6	AX146610	AX146610 Sequence
	12	31.4	2.0	50	6	AX057285	AX057285 Sequence
c	13	27	1.7	27	9	HSA270316	AJ270316 Homo sapi
	14	26	1.6	50	6	AR178318	AR178318 Sequence
	15	26	1.6	50	6	AX323400	AX323400 Sequence
	16	25	1.6	33	6	I84406	I84406 Sequence 7
	17	24.6	1.6	50	6	AR199385	AR199385 Sequence
	18	24	1.5	24	6	AR063105	AR063105 Sequence
	19	24	1.5	24	6	AR122632	AR122632 Sequence
	20	24	1.5	24	6	AR164260	AR164260 Sequence
	21	24	1.5	24	6	AR208932	AR208932 Sequence
	22	24	1.5	45	6	I20760	I20760 Sequence 13
c	23	23.6	1.5	30	6	I84401	I84401 Sequence 2
c	24	23.6	1.5	31	6	A01419	A01419 Malaria par
c	25	22.4	1.4	32	6	A62993	A62993 Sequence 5
c	26	22.4	1.4	32	6	AR179068	AR179068 Sequence
	27	22.4	1.4	43	6	A28677	A28677 Oligonucleo
c	28	22.2	1.4	50	6	AX397845	AX397845 Sequence
	29	22	1.4	23	9	HSA270315	AJ270315 Homo sapi
c	30	22	1.4	29	6	AX146574	AX146574 Sequence
c	31	22	1.4	29	6	AX417112	AX417112 Sequence
c	32	22	1.4	44	6	A28674	A28674 dsRNA with
c	33	22	1.4	50	8	SSREP2	V01364 Scilla sibe
	34	21.8	1.4	35	6	I45648	I45648 Sequence 7
c	35	21.8	1.4	50	4	S72333	S72333 enkephalin
c	36	21.8	1.4	50	5	XELRGT2	M13246 X.laevis ri
	37	21.6	1.4	40	6	A98997	A98997 Sequence 5
	38	21.6	1.4	40	6	AR195314	AR195314 Sequence
c	39	21.6	1.4	48	6	A21991	A21991 oligonucleo
	40	21.6	1.4	49	6	A21992	A21992 oligonucleo
c	41	21.4	1.4	31	6	A62992	A62992 Sequence 4
c	42	21.4	1.4	31	6	AR179067	AR179067 Sequence
	43	21.4	1.4	50	6	AR137495	AR137495 Sequence
c	44	21.4	1.4	50	9	HSHLX1A1	X96914 H.sapiens H
	45	21.2	1.3	49	6	AX397846	AX397846 Sequence
c	46	21	1.3	47	6	A28685	A28685 Oligonucleo
c	47	21	1.3	50	6	AR032762	AR032762 Sequence
c	48	21	1.3	50	6	AR209426	AR209426 Sequence
c	49	21	1.3	50	6	AX199622	AX199622 Sequence
c	50	21	1.3	50	6	I29502	I29502 Sequence 37
c	51	21	1.3	50	6	I91176	I91176 Sequence 37
	52	20.8	1.3	43	6	AX002786	AX002786 Sequence
	53	20.8	1.3	43	6	AX149545	AX149545 Sequence
	54	20.8	1.3	46	6	A92687	A92687 Sequence 2
c	55	20.8	1.3	46	6	A92687	A92687 Sequence 2
c	56	20.8	1.3	47	6	AX002787	AX002787 Sequence
c	57	20.8	1.3	47	6	AX149555	AX149555 Sequence
	58	20.8	1.3	49	6	AX279826	AX279826 Sequence
c	59	20.8	1.3	50	6	A51123	A51123 Sequence 1
	60	20.8	1.3	50	6	AX199605	AX199605 Sequence
c	61	20.6	1.3	38	6	AX207477	AX207477 Sequence
	62	20.6	1.3	41	6	AX327055	AX327055 Sequence
c	63	20.6	1.3	43	6	A28678	A28678 Oligonucleo
c	64	20.6	1.3	45	6	A05111	A05111 Oligonucleo
	65	20.6	1.3	45	6	AR145517	AR145517 Sequence

	66	20.6	1.3	48	6	A47495	A47495 Sequence 2
c	67	20.6	1.3	50	6	AX157874	AX157874 Sequence
c	68	20.4	1.3	30	6	A62990	A62990 Sequence 2
	69	20.4	1.3	30	6	A62996	A62996 Sequence 8
c	70	20.4	1.3	30	6	AR179065	AR179065 Sequence
	71	20.4	1.3	30	6	AR179071	AR179071 Sequence
c	72	20.4	1.3	30	6	AX104904	AX104904 Sequence
c	73	20.4	1.3	30	6	AX477343	AX477343 Sequence
c	74	20.4	1.3	35	6	AX104579	AX104579 Sequence
c	75	20.4	1.3	35	6	AX355144	AX355144 Sequence
c	76	20.4	1.3	40	6	AR184470	AR184470 Sequence
c	77	20.4	1.3	40	6	AX406837	AX406837 Sequence
	78	20.4	1.3	40	6	E13253	E13253 Oligonucleo
	79	20.4	1.3	41	6	AR106716	AR106716 Sequence
	80	20.4	1.3	41	6	AR202527	AR202527 Sequence
	81	20.4	1.3	44	6	AR199384	AR199384 Sequence
c	82	20.4	1.3	49	6	A21777	A21777 oligonucleo
c	83	20.4	1.3	49	6	AX279808	AX279808 Sequence
	84	20.4	1.3	50	6	AR137494	AR137494 Sequence
c	85	20.2	1.3	40	6	AX472253	AX472253 Sequence
c	86	20.2	1.3	40	6	E05618	E05618 Primer for
	87	20.2	1.3	46	6	A92686	A92686 Sequence 1
c	88	20.2	1.3	46	6	A92686	A92686 Sequence 1
	89	20.2	1.3	46	6	AR032473	AR032473 Sequence
	90	20.2	1.3	46	6	AR209137	AR209137 Sequence
	91	20.2	1.3	46	6	I29213	I29213 Sequence 85
	92	20.2	1.3	46	6	I90887	I90887 Sequence 85
c	93	20.2	1.3	47	6	AR071857	AR071857 Sequence
c	94	20.2	1.3	47	6	AR112597	AR112597 Sequence
	95	20.2	1.3	48	6	AR129985	AR129985 Sequence
	96	20.2	1.3	48	6	AR205077	AR205077 Sequence
	97	20.2	1.3	48	6	AX149574	AX149574 Sequence
	98	20	1.3	36	6	AX356948	AX356948 Sequence
c	99	20	1.3	42	6	AR116992	AR116992 Sequence
	100	20	1.3	45	6	AX080806	AX080806 Sequence
	101	20	1.3	45	6	AX191434	AX191434 Sequence
	102	20	1.3	45	6	AX403235	AX403235 Sequence
	103	20	1.3	45	6	I30008	I30008 Sequence 14
	104	20	1.3	45	6	I93784	I93784 Sequence 14
	105	20	1.3	47	12	SYNPRWA	M94403 Artificial
c	106	20	1.3	50	6	AR024001	AR024001 Sequence
c	107	20	1.3	50	6	E12787	E12787 DNA probe f
c	108	19.8	1.3	47	6	AX194734	AX194734 Sequence
	109	19.8	1.3	50	6	E00071	E00071 Partial cDN
c	110	19.6	1.2	42	6	AR210880	AR210880 Sequence
c	111	19.6	1.2	45	6	AX027549	AX027549 Sequence
	112	19.6	1.2	46	6	E32206	E32206 Method for
c	113	19.6	1.2	48	6	AX207748	AX207748 Sequence
	114	19.6	1.2	50	6	I18452	I18452 Sequence 75
	115	19.4	1.2	29	6	AX288078	AX288078 Sequence
c	116	19.4	1.2	33	6	A11717	A11717 oligonucleo
	117	19.4	1.2	33	6	A11718	A11718 oligonucleo
c	118	19.4	1.2	33	6	I14316	I14316 Sequence 13
c	119	19.4	1.2	37	6	AX288079	AX288079 Sequence
	120	19.4	1.2	43	6	AR161404	AR161404 Sequence
	121	19.4	1.2	49	6	A04202	A04202 Nucleotide
	122	19.4	1.2	49	6	AX157798	AX157798 Sequence
	123	19.4	1.2	50	6	AX202437	AX202437 Sequence
	124	19.2	1.2	24	6	AX327693	AX327693 Sequence
	125	19.2	1.2	33	6	AX236735	AX236735 Sequence
	126	19.2	1.2	36	6	AR193727	AR193727 Sequence
	127	19.2	1.2	41	6	E13926	E13926 Primer. 4/1
	128	19.2	1.2	41	6	E16035	E16035 DNA primer
c	129	19.2	1.2	42	6	AR035287	AR035287 Sequence
	130	19.2	1.2	44	6	I31473	I31473 Sequence 38
c	131	19.2	1.2	45	6	AX068135	AX068135 Sequence
c	132	19.2	1.2	45	6	I20761	I20761 Sequence 14
c	133	19.2	1.2	47	6	AR030771	AR030771 Sequence
c	134	19.2	1.2	47	6	AR101775	AR101775 Sequence
c	135	19.2	1.2	48	6	AR073450	AR073450 Sequence
	136	19.2	1.2	48	6	AX222000	AX222000 Sequence
c	137	19.2	1.2	49	6	AR032793	AR032793 Sequence
c	138	19.2	1.2	49	6	AR209457	AR209457 Sequence
c	139	19.2	1.2	49	6	AX107693	AX107693 Sequence
c	140	19.2	1.2	49	6	I29533	I29533 Sequence 40
c	141	19.2	1.2	49	6	I91207	I91207 Sequence 40
c	142	19.2	1.2	50	6	AX160636	AX160636 Sequence
	143	19.2	1.2	50	6	I89841	I89841 Sequence 12
	144	19	1.2	19	6	AR154250	AR154250 Sequence
	145	19	1.2	19	6	AR154254	AR154254 Sequence
	146	19	1.2	30	6	AX146573	AX146573 Sequence
	147	19	1.2	30	6	AX417111	AX417111 Sequence
	148	19	1.2	35	6	AX262313	AX262313 Sequence
c	149	19	1.2	36	6	A94124	A94124 Sequence 2
c	150	19	1.2	36	6	AX014659	AX014659 Sequence
	151	19	1.2	36	6	AX402097	AX402097 Sequence
	152	19	1.2	36	6	AX403811	AX403811 Sequence
c	153	19	1.2	36	6	E50995	E50995 Hedgehog pr
	154	19	1.2	38	6	A48819	A48819 Sequence 11
	155	19	1.2	39	6	AR201228	AR201228 Sequence
	156	19	1.2	39	6	AX081636	AX081636 Sequence
	157	19	1.2	39	6	AX374817	AX374817 Sequence
c	158	19	1.2	41	6	AR206162	AR206162 Sequence
	159	19	1.2	43	6	AX180257	AX180257 Sequence
	160	19	1.2	44	6	E11299	E11299 PCR primer
	161	19	1.2	45	6	AX108066	AX108066 Sequence
	162	19	1.2	46	6	A38923	A38923 Sequence 10
	163	19	1.2	46	6	AR054319	AR054319 Sequence
	164	19	1.2	46	9	HSU34722	U34722 Homo sapien
	165	19	1.2	47	6	AX004825	AX004825 Sequence
	166	19	1.2	48	6	AX150279	AX150279 Sequence
c	167	19	1.2	50	6	AX057285	AX057285 Sequence
c	168	19	1.2	50	9	HSHLX1A4	X96921 H.sapiens H
c	169	18.8	1.2	32	6	AX067720	AX067720 Sequence
	170	18.8	1.2	38	6	AX108708	AX108708 Sequence
c	171	18.8	1.2	39	6	AR201228	AR201228 Sequence
c	172	18.8	1.2	39	6	AX080628	AX080628 Sequence
	173	18.8	1.2	40	6	AR055062	AR055062 Sequence
	174	18.8	1.2	40	6	AR156311	AR156311 Sequence
c	175	18.8	1.2	40	6	AX288072	AX288072 Sequence
	176	18.8	1.2	41	6	A38181	A38181 Sequence 25
	177	18.8	1.2	42	6	AX288063	AX288063 Sequence
c	178	18.8	1.2	42	6	AX288064	AX288064 Sequence
	179	18.8	1.2	44	6	A21445	A21445 oligonucleo
	180	18.8	1.2	44	6	A37850	A37850 Sequence 20
	181	18.8	1.2	44	6	AR069888	AR069888 Sequence
	182	18.8	1.2	44	6	AR099285	AR099285 Sequence
	183	18.8	1.2	44	6	AR124169	AR124169 Sequence
	184	18.8	1.2	44	6	E43912	E43912 Novel vecto
c	185	18.8	1.2	45	6	AX068136	AX068136 Sequence
c	186	18.8	1.2	45	6	AX068137	AX068137 Sequence
c	187	18.8	1.2	45	6	AX068139	AX068139 Sequence
	188	18.8	1.2	45	6	E02957	E02957 Signal repe
	189	18.8	1.2	46	6	AX190432	AX190432 Sequence
c	190	18.8	1.2	47	6	AR055043	AR055043 Sequence
c	191	18.8	1.2	47	6	AR156292	AR156292 Sequence
	192	18.8	1.2	48	6	AR019022	AR019022 Sequence
	193	18.8	1.2	48	6	AR130422	AR130422 Sequence
	194	18.8	1.2	48	6	AX278749	AX278749 Sequence
	195	18.8	1.2	48	6	AX279916	AX279916 Sequence
	196	18.8	1.2	49	6	AX279656	AX279656 Sequence
	197	18.8	1.2	49	6	AX279677	AX279677 Sequence
	198	18.8	1.2	49	6	AX279825	AX279825 Sequence
	199	18.8	1.2	50	6	AX351171	AX351171 Sequence
	200	18.6	1.2	25	6	AR028113	AR028113 Sequence
	201	18.6	1.2	25	6	AR030289	AR030289 Sequence
	202	18.6	1.2	25	6	I42108	I42108 Sequence 3
	203	18.6	1.2	28	6	AX010555	AX010555 Sequence
	204	18.6	1.2	36	6	AX050277	AX050277 Sequence
	205	18.6	1.2	38	6	AX059027	AX059027 Sequence
	206	18.6	1.2	44	6	A94787	A94787 Sequence 31
	207	18.6	1.2	44	6	E11304	E11304 PCR primer
	208	18.6	1.2	45	6	AR118818	AR118818 Sequence
c	209	18.6	1.2	45	6	AX080806	AX080806 Sequence
c	210	18.6	1.2	45	6	AX191434	AX191434 Sequence
c	211	18.6	1.2	45	6	AX403235	AX403235 Sequence

	212	18.6	1.2	48	6 A47501
	213	18.6	1.2	48	6 AX207747
c	214	18.6	1.2	49	6 AR014134
c	215	18.6	1.2	49	6 AX278779
	216	18.6	1.2	49	6 AX279676
c	217	18.6	1.2	49	6 AX279946
c	218	18.6	1.2	49	6 I18451
c	219	18.6	1.2	50	6 AR032851
c	220	18.6	1.2	50	6 AR209515
c	221	18.6	1.2	50	6 AX157405
c	222	18.6	1.2	50	6 I29591
c	223	18.6	1.2	50	6 I91265
c	224	18.4	1.2	28	6 AX104578
c	225	18.4	1.2	28	6 AX355143
	226	18.4	1.2	31	6 AX249029
	227	18.4	1.2	32	6 AX288071
	228	18.4	1.2	33	6 AX068142
	229	18.4	1.2	36	6 AX356940
c	230	18.4	1.2	42	6 I00662
c	231	18.4	1.2	43	6 A50977
	232	18.4	1.2	44	6 AR086388
c	233	18.4	1.2	44	6 AX001092
	234	18.4	1.2	45	6 AX231579
	235	18.4	1.2	45	6 I60574
c	236	18.4	1.2	47	6 AX211584
	237	18.4	1.2	47	6 AX429816
c	238	18.4	1.2	47	6 I84675
c	239	18.4	1.2	48	6 AX207754
	240	18.4	1.2	48	6 AX253583
	241	18.4	1.2	49	6 AR032793
	242	18.4	1.2	49	6 AR209457
	243	18.4	1.2	49	6 AX279597
c	244	18.4	1.2	49	6 AX279820
	245	18.4	1.2	49	6 I29533
	246	18.4	1.2	49	6 I91207
c	247	18.4	1.2	50	6 A07724
c	248	18.4	1.2	50	6 A10023
c	249	18.4	1.2	50	6 AR032514
	250	18.4	1.2	50	6 AR032869
c	251	18.4	1.2	50	6 AR209178
	252	18.4	1.2	50	6 AR209533
	253	18.4	1.2	50	6 AX019535
	254	18.4	1.2	50	6 AX162468
c	255	18.4	1.2	50	6 AX165817
c	256	18.4	1.2	50	6 AX426994
c	257	18.4	1.2	50	6 I29254
	258	18.4	1.2	50	6 I29609
c	259	18.4	1.2	50	6 I90928
	260	18.4	1.2	50	6 I91283
	261	18.2	1.2	24	6 AR063245
c	262	18.2	1.2	25	6 E16681
	263	18.2	1.2	35	6 AR202292
	264	18.2	1.2	39	6 AR033894
	265	18.2	1.2	39	6 AR175027
	266	18.2	1.2	39	6 AX032459
	267	18.2	1.2	39	6 E11415
c	268	18.2	1.2	40	6 AR079790
c	269	18.2	1.2	40	6 AR081320
c	270	18.2	1.2	40	6 AR170680
	271	18.2	1.2	41	6 A38185
	272	18.2	1.2	42	6 AX077421
c	273	18.2	1.2	43	6 AX456423
c	274	18.2	1.2	45	6 AR071841
c	275	18.2	1.2	45	6 AR112581
	276	18.2	1.2	45	9 HSBIA1G1B
	277	18.2	1.2	46	6 AR032572
	278	18.2	1.2	46	6 AR209236
	279	18.2	1.2	46	6 I29312
	280	18.2	1.2	46	6 I90986
	281	18.2	1.2	47	6 AX278807
	282	18.2	1.2	47	6 AX279974
	283	18.2	1.2	47	10 MUSIGHYV
c	284	18.2	1.2	48	6 A62955

A47501 Sequence 8
AX207747 Sequence
AR014134 Sequence
AX278779 Sequence
AX279676 Sequence
AX279946 Sequence
I18451 Sequence 74
AR032851 Sequence
AR209515 Sequence
AX157405 Sequence
I29591 Sequence 46
I91265 Sequence 46
AX104578 Sequence
AX355143 Sequence
AX249029 Sequence
AX288071 Sequence
AX068142 Sequence
AX356940 Sequence
I00662 Sequence 3
A50977 Sequence 18
AR086388 Sequence
AX001092 Sequence
AX231579 Sequence
I60574 Sequence 31
AX211584 Sequence
AX429816 Sequence
I84675 Sequence 9
AX207754 Sequence
AX253583 Sequence
AR032793 Sequence
AR209457 Sequence
AX279597 Sequence
AX279820 Sequence
I29533 Sequence 40
I91207 Sequence 40
A07724 Oligonucleo
A10023 Nucleotide
AR032514 Sequence
AR032869 Sequence
AR209178 Sequence
AR209533 Sequence
AX019535 Sequence
AX162468 Sequence
AX165817 Sequence
AX426994 Sequence
I29254 Sequence 12
I29609 Sequence 48
I90928 Sequence 12
I91283 Sequence 48
AR063245 Sequence
E16681 Primer. 7/1
AR202292 Sequence
AR033894 Sequence
AR175027 Sequence
AX032459 Sequence
E11415 Primer. 9/1
AR079790 Sequence
AR081320 Sequence
AR170680 Sequence
A38185 Sequence 29
AX077421 Sequence
AX456423 Sequence
AR071841 Sequence
AR112581 Sequence
X72166 H.sapiens (
AR032572 Sequence
AR209236 Sequence
I29312 Sequence 18
I90986 Sequence 18
AX278807 Sequence
AX279974 Sequence
M22392 Mouse Ig ge
A62955 Sequence 19

	285	18.2	1.2	48	6 AR202324
	286	18.2	1.2	48	6 AX059009
	287	18.2	1.2	48	6 AX229277
	288	18.2	1.2	48	6 AX453570
	289	18.2	1.2	48	6 I06257
c	290	18.2	1.2	48	9 S34436
c	291	18.2	1.2	49	6 AX279658
	292	18.2	1.2	49	6 AX279675
	293	18.2	1.2	49	6 AX279727
	294	18.2	1.2	50	6 AR032719
c	295	18.2	1.2	50	6 AR145250
	296	18.2	1.2	50	6 AR209383
c	297	18.2	1.2	50	6 AX161854
c	298	18.2	1.2	50	6 AX204297
	299	18.2	1.2	50	6 I29459
	300	18.2	1.2	50	6 I91133
	301	18.2	1.2	50	10 MMVIMV47
c	302	18	1.1	18	6 AR154251
	303	18	1.1	27	6 AR040322
	304	18	1.1	36	6 AR084542
c	305	18	1.1	36	6 AR206158
c	306	18	1.1	39	6 AR200691
	307	18	1.1	39	6 I06515
	308	18	1.1	41	6 A38183
	309	18	1.1	42	6 A42175
	310	18	1.1	42	6 A50686
	311	18	1.1	42	6 A50722
	312	18	1.1	42	6 AR004820
	313	18	1.1	42	6 AR035286
	314	18	1.1	42	6 AR051254
	315	18	1.1	42	6 AR083317
	316	18	1.1	42	6 AR116201
c	317	18	1.1	42	6 AX009738
	318	18	1.1	42	6 I28383
	319	18	1.1	42	6 I71226
c	320	18	1.1	43	6 A04391
	321	18	1.1	43	6 A81880
	322	18	1.1	43	6 AR120683
	323	18	1.1	43	6 AX322481
	324	18	1.1	43	6 I34859
	325	18	1.1	44	6 AX297758
	326	18	1.1	45	6 AX068135
	327	18	1.1	46	6 AR157388
	328	18	1.1	46	6 AX004805
	329	18	1.1	47	6 AX004827
c	330	18	1.1	47	6 AX195051
	331	18	1.1	48	6 AR032591
	332	18	1.1	48	6 AR184250
	333	18	1.1	48	6 AR184371
	334	18	1.1	48	6 AR209255
	335	18	1.1	48	6 AX127962
c	336	18	1.1	48	6 AX253582
c	337	18	1.1	48	6 E13605
	338	18	1.1	48	6 I29331
	339	18	1.1	48	6 I91005
	340	18	1.1	49	6 AX279622
	341	18	1.1	49	6 AX279645
	342	18	1.1	50	4 F292317S04
	343	18	1.1	50	6 AR014135
	344	18	1.1	50	6 AR032762
c	345	18	1.1	50	6 AR032862
	346	18	1.1	50	6 AR162078
	347	18	1.1	50	6 AR166603
	348	18	1.1	50	6 AR209426
c	349	18	1.1	50	6 AR209526
c	350	18	1.1	50	6 AX019536
c	351	18	1.1	50	6 AX159942
c	352	18	1.1	50	6 AX160484
	353	18	1.1	50	6 BD002070
	354	18	1.1	50	6 I29502
c	355	18	1.1	50	6 I29602
	356	18	1.1	50	6 I31257
	357	18	1.1	50	6 I91176

AR202324 Sequence
AX059009 Sequence
AX229277 Sequence
AX453570 Sequence
I06257 Sequence 15
S34436 glycoprotei
AX279658 Sequence
AX279675 Sequence
AX279727 Sequence
AR032719 Sequence
AR145250 Sequence
AR209383 Sequence
AX161854 Sequence
AX204297 Sequence
I29459 Sequence 33
I91133 Sequence 33
X89164 M.musculus
AR154251 Sequence
AR040322 Sequence
AR084542 Sequence
AR206158 Sequence
AR200691 Sequence
I06515 Sequence 19
A38183 Sequence 27
A42175 Sequence 65
A50686 Sequence 25
A50722 Sequence 16
AR004820 Sequence
AR035286 Sequence
AR051254 Sequence
AR083317 Sequence
AR116201 Sequence
AX009738 Sequence
I28383 Sequence 22
I71226 Sequence 23
A04391 Oligonucleo
A81880 Sequence 11
AR120683 Sequence
AX322481 Sequence
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AX068135 Sequence
AR157388 Sequence
AX004805 Sequence
AX004827 Sequence
AX195051 Sequence
AR032591 Sequence
AR184250 Sequence
AR184371 Sequence
AR209255 Sequence
AX127962 Sequence
AX253582 Sequence
E13605 Linker. 4/1
I29331 Sequence 20
I91005 Sequence 20
AX279622 Sequence
AX279645 Sequence
AF292320 Bos tauru
AR014135 Sequence
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AR032862 Sequence
AR162078 Sequence
AR166603 Sequence
AR209426 Sequence
AR209526 Sequence
AX019536 Sequence
AX159942 Sequence
AX160484 Sequence
BD002070 Method of
I29502 Sequence 37
I29602 Sequence 47
I31257 Sequence 16
I91176 Sequence 37

c 358	18	1.1	50	6	I91276
c 359	17.8	1.1	21	6	AR177692
360	17.8	1.1	31	6	AX248046
361	17.8	1.1	31	6	AX249447
c 362	17.8	1.1	39	6	AX202296
363	17.8	1.1	39	6	AX250377
364	17.8	1.1	44	6	E11301
c 365	17.8	1.1	45	6	AR032679
c 366	17.8	1.1	45	6	AR040714
367	17.8	1.1	45	6	AR141182
368	17.8	1.1	45	6	AR141183
c 369	17.8	1.1	45	6	AR209343
c 370	17.8	1.1	45	6	I29419
c 371	17.8	1.1	45	6	I91093
372	17.8	1.1	46	6	A98794
c 373	17.8	1.1	46	6	I12506
374	17.8	1.1	46	6	I12507
c 375	17.8	1.1	46	6	I12508
376	17.8	1.1	46	6	I12509
377	17.8	1.1	47	6	AR086675
378	17.8	1.1	47	6	AX252287
c 379	17.8	1.1	47	10	MUSIGHYV
380	17.8	1.1	48	6	A18448
381	17.8	1.1	48	6	AR000192
382	17.8	1.1	48	6	AX207753
383	17.8	1.1	49	6	A27752
384	17.8	1.1	50	6	A14174
385	17.8	1.1	50	6	A14176
386	17.8	1.1	50	6	A14178
387	17.8	1.1	50	6	A14198
c 388	17.8	1.1	50	6	AR032925
c 389	17.8	1.1	50	6	AR209589
390	17.8	1.1	50	6	AX157456
c 391	17.8	1.1	50	6	I29665
c 392	17.8	1.1	50	6	I91339
393	17.8	1.1	50	9	AF057500
394	17.8	1.1	50	9	AF057514
395	17.8	1.1	50	9	AF176985S5
396	17.8	1.1	50	9	HSHLX1D4
397	17.6	1.1	28	6	AX010556
398	17.6	1.1	28	6	AX183895
399	17.6	1.1	30	6	AX343761
c 400	17.6	1.1	31	6	AX003697
c 401	17.6	1.1	31	6	BD002916
c 402	17.6	1.1	32	6	AR182071
c 403	17.6	1.1	34	6	A00833
c 404	17.6	1.1	34	6	A16002
405	17.6	1.1	34	6	AR003387
406	17.6	1.1	34	6	I21176
407	17.6	1.1	34	6	I74443
c 408	17.6	1.1	36	6	A47503
c 409	17.6	1.1	36	6	AR123709
410	17.6	1.1	36	6	AR206158
c 411	17.6	1.1	36	6	I34917
412	17.6	1.1	40	6	A69174
c 413	17.6	1.1	41	6	A65145
414	17.6	1.1	41	6	AR032631
415	17.6	1.1	41	6	AR209295
c 416	17.6	1.1	41	6	AX015113
c 417	17.6	1.1	41	6	AX174849
418	17.6	1.1	41	6	E02634
419	17.6	1.1	41	6	I29371
420	17.6	1.1	41	6	I91045
421	17.6	1.1	42	6	AX068138
422	17.6	1.1	42	10	MUSMHAB05
c 423	17.6	1.1	44	6	A69175
424	17.6	1.1	44	6	AR032451
425	17.6	1.1	44	6	AR079003
426	17.6	1.1	44	6	AR209115
c 427	17.6	1.1	44	6	I04406
c 428	17.6	1.1	44	6	I04435
429	17.6	1.1	44	6	I29191
430	17.6	1.1	44	6	I90865

I91276 Sequence 47
AR177692 Sequence
AX248046 Sequence
AX249447 Sequence
AX202296 Sequence
AX250377 Sequence
E11301 PCR primer
AR032679 Sequence
AR040714 Sequence
AR141182 Sequence
AR141183 Sequence
AR209343 Sequence
I29419 Sequence 29
I91093 Sequence 29
A98794 Sequence 27
I12506 Sequence 28
I12507 Sequence 29
I12508 Sequence 31
I12509 Sequence 32
AR086675 Sequence
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M22392 Mouse Ig ge
A18448 oligonucleo
AR000192 Sequence
AX207753 Sequence
A27752 Plasmid seq
A14174 vectorette
A14176 vectorette
A14178 vectorette
A14198 specific ve
AR032925 Sequence
AR209589 Sequence
AX157456 Sequence
I29665 Sequence 53
I91339 Sequence 53
AF057500 Homo sapi
AF057514 Homo sapi
AF176989 Homo sapi
X96920 H.sapiens H
AX010556 Sequence
AX183895 Sequence
AX343761 Sequence
AX003697 Sequence
BD002916 Gene comp
AR182071 Sequence
A00833 Adapter (re
A16002 adapter mol
AR003387 Sequence
I21176 Sequence 22
I74443 Sequence 22
A47503 Sequence 10
AR123709 Sequence
AR206158 Sequence
I34917 Sequence 3
A69174 Sequence 92
A65145 Sequence 1
AR032631 Sequence
AR209295 Sequence
AX015113 Sequence
AX174849 Sequence
E02634 linker. 9/1
I29371 Sequence 24
I91045 Sequence 24
AX068138 Sequence
M86506 M.musculus
A69175 Sequence 93
AR032451 Sequence
AR079003 Sequence
AR209115 Sequence
I04406 Sequence 4
I04435 Sequence 33
I29191 Sequence 63
I90865 Sequence 63

c 431	17.6	1.1	45	6	AR026070
432	17.6	1.1	45	6	AR085812
433	17.6	1.1	45	6	AX010369
c 434	17.6	1.1	45	6	AX010370
435	17.6	1.1	45	6	AX472849
c 436	17.6	1.1	45	6	AX472850
c 437	17.6	1.1	45	6	I92648
c 438	17.6	1.1	46	1	AFU430234
439	17.6	1.1	46	6	A38210
c 440	17.6	1.1	46	6	AX157711
441	17.6	1.1	46	6	I22397
c 442	17.6	1.1	47	6	A89623
c 443	17.6	1.1	47	6	A93558
c 444	17.6	1.1	47	6	AR176118
c 445	17.6	1.1	47	6	AR182398
c 446	17.6	1.1	47	6	AX194728
c 447	17.6	1.1	48	6	A14922
448	17.6	1.1	48	6	A19431
449	17.6	1.1	48	6	AR026089
450	17.6	1.1	48	6	AR195131
451	17.6	1.1	48	6	I13412
c 452	17.6	1.1	48	9	S68399
453	17.6	1.1	49	6	AR032650
454	17.6	1.1	49	6	AR209314
455	17.6	1.1	49	6	AX278769
456	17.6	1.1	49	6	AX279936
457	17.6	1.1	49	6	I29390
458	17.6	1.1	49	6	I91064
459	17.6	1.1	49	9	HUMNTCOF25
c 460	17.6	1.1	49	10	MUSIGHSWIU
c 461	17.6	1.1	50	6	A69173
462	17.6	1.1	50	6	AR032912
c 463	17.6	1.1	50	6	AR032979
464	17.6	1.1	50	6	AR091514
465	17.6	1.1	50	6	AR154394
466	17.6	1.1	50	6	AR157999
467	17.6	1.1	50	6	AR174322
468	17.6	1.1	50	6	AR183306
469	17.6	1.1	50	6	AR209576
c 470	17.6	1.1	50	6	AR209643
471	17.6	1.1	50	6	AR210478
472	17.6	1.1	50	6	AX080358
473	17.6	1.1	50	6	AX159414
c 474	17.6	1.1	50	6	AX199605
c 475	17.6	1.1	50	6	AX233378
476	17.6	1.1	50	6	I29652
c 477	17.6	1.1	50	6	I29719
478	17.6	1.1	50	6	I91326
c 479	17.6	1.1	50	6	I91393
480	17.6	1.1	50	10	MMU41953
481	17.4	1.1	26	6	A94123
482	17.4	1.1	26	6	AX014658
483	17.4	1.1	26	6	E50994
c 484	17.4	1.1	27	6	E04986
485	17.4	1.1	27	6	E04987
486	17.4	1.1	28	6	AR199381
487	17.4	1.1	30	6	E14027
c 488	17.4	1.1	31	6	AX248134
c 489	17.4	1.1	31	6	AX248140
490	17.4	1.1	31	6	AX248597
491	17.4	1.1	31	6	AX248880
492	17.4	1.1	31	6	AX249132
493	17.4	1.1	35	6	AR049526
494	17.4	1.1	35	6	AR065731
495	17.4	1.1	35	6	AR171308
496	17.4	1.1	35	6	AX080146
497	17.4	1.1	35	6	AX201766
c 498	17.4	1.1	36	6	AR104430
499	17.4	1.1	36	6	I78169
c 500	17.4	1.1	37	6	AX298019
501	17.4	1.1	38	6	AR021293
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503	17.4	1.1	38	6	AR160091

AR026070 Sequence
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AR171308 Sequence
AX080146 Sequence
AX201766 Sequence
AR104430 Sequence
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AR129336 Sequence
AR160091 Sequence

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c 506	17.4	1.1	41	6	A13534
507	17.4	1.1	41	6	AX006150
508	17.4	1.1	41	6	AX327045
c 509	17.4	1.1	41	6	AX327070
510	17.4	1.1	42	6	AX166901
511	17.4	1.1	42	6	E26049
c 512	17.4	1.1	42	6	I95011
c 513	17.4	1.1	43	6	AX483436
514	17.4	1.1	43	6	I00832
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517	17.4	1.1	44	6	AR032540
518	17.4	1.1	44	6	AR209204
c 519	17.4	1.1	44	6	AX112010
520	17.4	1.1	44	6	I29280
521	17.4	1.1	44	6	I90954
c 522	17.4	1.1	44	9	HUMTCVD1BL
523	17.4	1.1	44	9	HUMTCCVJ29
524	17.4	1.1	45	6	A05111
c 525	17.4	1.1	45	6	AR032587
c 526	17.4	1.1	45	6	AR168032
c 527	17.4	1.1	45	6	AR204803
c 528	17.4	1.1	45	6	AR209251
c 529	17.4	1.1	45	6	I29327
c 530	17.4	1.1	45	6	I91001
531	17.4	1.1	46	6	I27049
532	17.4	1.1	47	6	AR032401
533	17.4	1.1	47	6	AR209065
534	17.4	1.1	47	6	AX004828
535	17.4	1.1	47	6	AX004830
536	17.4	1.1	47	6	AX080981
537	17.4	1.1	47	6	AX404877
538	17.4	1.1	47	6	I29141
539	17.4	1.1	47	6	I90815
c 540	17.4	1.1	48	6	A47501
541	17.4	1.1	48	6	A62956
542	17.4	1.1	48	6	A97298
543	17.4	1.1	48	6	AX150273
544	17.4	1.1	49	6	I95010
545	17.4	1.1	50	6	A60808
546	17.4	1.1	50	6	AX156889
547	17.4	1.1	50	6	AX160148
548	17.4	1.1	50	6	AX160470
549	17.4	1.1	50	6	AX160472
c 550	17.4	1.1	50	6	AX161340
551	17.4	1.1	50	6	AX161968
c 552	17.4	1.1	50	6	AX190233
c 553	17.4	1.1	50	6	AX199626
c 554	17.4	1.1	50	6	AX202435
555	17.4	1.1	50	6	AX453556
556	17.4	1.1	50	6	I23716
557	17.4	1.1	50	6	I24075
558	17.4	1.1	50	6	I27200
559	17.4	1.1	50	10	MMU41938
c 560	17.2	1.1	24	6	AR028416
c 561	17.2	1.1	24	6	AR130926
c 562	17.2	1.1	24	6	AR161892
563	17.2	1.1	30	6	AX104905
c 564	17.2	1.1	30	6	AX104905
565	17.2	1.1	30	6	E04679
c 566	17.2	1.1	30	6	E04682
567	17.2	1.1	30	6	E30036
c 568	17.2	1.1	32	6	AX009737
569	17.2	1.1	33	6	AX011221
c 570	17.2	1.1	34	6	A14039
571	17.2	1.1	34	6	A14040
c 572	17.2	1.1	34	6	A31929
c 573	17.2	1.1	35	6	AR159970
c 574	17.2	1.1	35	6	AX028956
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E31247 Device for

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579	17.2	1.1	37	6	AR108958
c 580	17.2	1.1	39	6	AX283647
581	17.2	1.1	39	10	S86273
c 582	17.2	1.1	40	6	A19014
583	17.2	1.1	40	6	I12505
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585	17.2	1.1	41	6	A38186
586	17.2	1.1	41	6	A38204
587	17.2	1.1	41	6	AR016437
c 588	17.2	1.1	42	6	AR058948
589	17.2	1.1	42	6	AR097752
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c 593	17.2	1.1	42	6	AR138167
c 594	17.2	1.1	42	6	AR176728
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c 598	17.2	1.1	43	6	AR013755
c 599	17.2	1.1	43	6	AX135623
600	17.2	1.1	43	6	AX466471
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c 603	17.2	1.1	44	6	I82392
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c 605	17.2	1.1	45	6	AX027553
c 606	17.2	1.1	46	6	A98793
607	17.2	1.1	46	6	AR032571
608	17.2	1.1	46	6	AR209235
609	17.2	1.1	46	6	I29311
610	17.2	1.1	46	6	I90985
c 611	17.2	1.1	47	6	AR169657
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613	17.2	1.1	47	6	AX010672
614	17.2	1.1	47	6	AX128389
615	17.2	1.1	47	6	AX254660
616	17.2	1.1	47	6	E58964
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619	17.2	1.1	48	6	AR135812
c 620	17.2	1.1	48	6	AR135812
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c 622	17.2	1.1	48	6	AR135814
623	17.2	1.1	48	6	AR135816
c 624	17.2	1.1	48	6	AR135816
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630	17.2	1.1	49	6	AX278759
631	17.2	1.1	49	6	AX279926
632	17.2	1.1	49	6	I20745
633	17.2	1.1	50	6	A45017
c 634	17.2	1.1	50	6	AR032500
c 635	17.2	1.1	50	6	AR032719
c 636	17.2	1.1	50	6	AR209164
c 637	17.2	1.1	50	6	AR209383
638	17.2	1.1	50	6	AX160730
639	17.2	1.1	50	6	AX165889
c 640	17.2	1.1	50	6	AX199624
c 641	17.2	1.1	50	6	AX202437
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c 644	17.2	1.1	50	6	I29240
c 645	17.2	1.1	50	6	I29459
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c 647	17.2	1.1	50	6	I91133
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	652	17.2	1.1	50	9	S72295S4
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	654	17	1.1	26	6	E16680
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	659	17	1.1	32	6	AX281125
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c	661	17	1.1	33	6	A14926
	662	17	1.1	33	6	AR093707
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	664	17	1.1	33	6	AR139631
	665	17	1.1	33	6	AR154143
c	666	17	1.1	33	6	AR202528
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	668	17	1.1	35	6	A25417
	669	17	1.1	35	6	AR096977
c	670	17	1.1	35	6	AR145497
	671	17	1.1	36	6	AX398700
c	672	17	1.1	37	6	AR093706
c	673	17	1.1	37	6	AR094473
c	674	17	1.1	37	6	AR139630
c	675	17	1.1	37	6	AR154142
	676	17	1.1	38	6	AR016401
	677	17	1.1	38	6	AR019259
c	678	17	1.1	38	6	AR058958
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c	680	17	1.1	38	6	AR119153
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c	682	17	1.1	38	6	AR138177
c	683	17	1.1	38	6	AR176738
c	684	17	1.1	38	6	AR198309
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	686	17	1.1	38	6	AX273417
	687	17	1.1	38	6	AX398684
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c	689	17	1.1	38	6	AX470002
	690	17	1.1	39	6	AX108712
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	693	17	1.1	39	6	AX351191
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	695	17	1.1	40	6	AR053704
c	696	17	1.1	40	6	AR201283
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	698	17	1.1	41	6	AR099670
	699	17	1.1	41	6	AX004833
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c	703	17	1.1	42	6	AR063931
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c	706	17	1.1	43	6	AR200692
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c	708	17	1.1	43	6	AX097541
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	710	17	1.1	44	6	AX027828
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	717	17	1.1	45	6	AX068139
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c	719	17	1.1	45	6	AX267810
c	720	17	1.1	46	6	A20001
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c	765	16.8	1.1	29	6	AR050002
c	766	16.8	1.1	29	6	AR100031
	767	16.8	1.1	30	6	AR081910
c	768	16.8	1.1	30	6	AR122637
c	769	16.8	1.1	30	6	AR164243
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	775	16.8	1.1	31	6	AX248452
c	776	16.8	1.1	31	6	AX249447
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c	783	16.8	1.1	33	6	AR144717
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	785	16.8	1.1	33	6	BD011387
c	786	16.8	1.1	33	6	BD011388
	787	16.8	1.1	33	6	E43857
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ALIGNMENTS

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DEFINITION  Sequence 44 from Patent WO0134654.
ACCESSION   AX146582
VERSION     AX146582.1  GI:14284975
KEYWORDS    .
SOURCE      human.
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 50)
  AUTHORS   Strauch,K.
  TITLE     Hedgehog fusion proteins and uses
  JOURNAL   Patent: WO 0134654-A 44 17-MAY-2001;
            BIOGEN, INC. (US)
FEATURES             Location/Qualifiers
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LOCUS       AX146613                 50 bp    DNA     linear   PAT 31-MAY-2001
DEFINITION  Sequence 75 from Patent WO0134654.
ACCESSION   AX146613
VERSION     AX146613.1  GI:14285006
KEYWORDS    .
SOURCE      human.
  ORGANISM  Homo sapiens
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REFERENCE   1  (bases 1 to 50)
  AUTHORS   Strauch,K.
  TITLE     Hedgehog fusion proteins and uses
  JOURNAL   Patent: WO 0134654-A 75 17-MAY-2001;
            BIOGEN, INC. (US)
FEATURES             Location/Qualifiers
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Qy     228 CGGGCAGGGGGTTCGGGAAGAGGAGGCACCCCAAAAAGCTGACCCCTTTA 277
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Db      50 CGGGCAGGGGGTTCGGGAAGAAGAGGCACCCCAAAAAGCTGACCCCTTTA 1


RESULT 3
AX146614/c
LOCUS       AX146614                 50 bp    DNA     linear   PAT 31-MAY-2001
DEFINITION  Sequence 76 from Patent WO0134654.
ACCESSION   AX146614
VERSION     AX146614.1  GI:14285007
KEYWORDS    .
SOURCE      human.
  ORGANISM  Homo sapiens
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            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 50)
  AUTHORS   Strauch,K.
  TITLE     Hedgehog fusion proteins and uses
  JOURNAL   Patent: WO 0134654-A 76 17-MAY-2001;
            BIOGEN, INC. (US)
FEATURES             Location/Qualifiers
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RESULT 4
AX146616/c
LOCUS       AX146616                  50 bp    DNA     linear   PAT 31-MAY-2001
DEFINITION  Sequence 78 from Patent WO0134654.
ACCESSION   AX146616
VERSION     AX146616.1  GI:14285009
KEYWORDS    .
SOURCE      human.
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 50)
  AUTHORS   Strauch,K.
  TITLE     Hedgehog fusion proteins and uses
  JOURNAL   Patent: WO 0134654-A 78 17-MAY-2001;
            BIOGEN, INC. (US)
FEATURES             Location/Qualifiers
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                     /db_xref="taxon:9606"
BASE COUNT         6 a      19 c      15 g      10 t
ORIGIN

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Db      50 CGGGCAGGGGGTTCGGGAAGAGGAGGCACCCCCAGCAGCTGACCCCTTTA 1


RESULT 5
AX146608
LOCUS       AX146608                  47 bp    DNA     linear   PAT 31-MAY-2001
DEFINITION  Sequence 70 from Patent WO0134654.
ACCESSION   AX146608
VERSION     AX146608.1  GI:14285001
KEYWORDS    .
SOURCE      human.
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 47)
  AUTHORS   Strauch,K.
  TITLE     Hedgehog fusion proteins and uses
  JOURNAL   Patent: WO 0134654-A 70 17-MAY-2001;
            BIOGEN, INC. (US)
FEATURES             Location/Qualifiers
     source          1. .47
                     /organism="Homo sapiens"
                     /db_xref="taxon:9606"
BASE COUNT        13 a      13 c      18 g       3 t
ORIGIN

  Query Match              2.8%;  Score 43.8;  DB 6;  Length 47;
  Best Local Similarity   95.7%;  Pred. No. 3.8e+04;
  Matches   45;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy     225 GACCGGGCAGGGGGTTCGGGAAGAGGAGGCACCCCAAAAAGCTGACC 271
           | ||||||||||||||||||||||| ||||||||||||||||||||||
Db       1 GCCCGGGCAGGGGGTTCGGGAAGAAGAGGCACCCCAAAAAGCTGACC 47


RESULT 6
AX146609
LOCUS       AX146609                  47 bp    DNA     linear   PAT 31-MAY-2001
DEFINITION  Sequence 71 from Patent WO0134654.
ACCESSION   AX146609
VERSION     AX146609.1  GI:14285002
KEYWORDS    .
SOURCE      human.
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 47)
  AUTHORS   Strauch,K.
  TITLE     Hedgehog fusion proteins and uses
  JOURNAL   Patent: WO 0134654-A 71 17-MAY-2001;
            BIOGEN, INC. (US)
FEATURES             Location/Qualifiers
     source          1. .47
                     /organism="Homo sapiens"
                     /db_xref="taxon:9606"
BASE COUNT        11 a      13 c      20 g       3 t
ORIGIN

  Query Match              2.8%;  Score 43.8;  DB 6;  Length 47;
  Best Local Similarity   95.7%;  Pred. No. 3.8e+04;
  Matches   45;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy     225 GACCGGGCAGGGGGTTCGGGAAGAGGAGGCACCCCAAAAAGCTGACC 271
           | ||||||||||||||||||||| ||||||||||||||||||||||||
Db       1 GCCCGGGCAGGGGGTTCGGGAGGAGGAGGCACCCCAAAAAGCTGACC 47


RESULT 7
AX146612
LOCUS       AX146612                  45 bp    DNA     linear   PAT 31-MAY-2001
DEFINITION  Sequence 74 from Patent WO0134654.
ACCESSION   AX146612
VERSION     AX146612.1  GI:14285005
KEYWORDS    .
SOURCE      human.
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 45)
  AUTHORS   Strauch,K.
  TITLE     Hedgehog fusion proteins and uses
  JOURNAL   Patent: WO 0134654-A 74 17-MAY-2001;
            BIOGEN, INC. (US)
FEATURES             Location/Qualifiers
     source          1. .45
                     /organism="Homo sapiens"
                     /db_xref="taxon:9606"
BASE COUNT        12 a      14 c      10 g       9 t
ORIGIN

  Query Match              2.8%;  Score 43.4;  DB 6;  Length 45;
  Best Local Similarity   97.8%;  Pred. No. 4.3e+04;
  Matches   44;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy     272 CCTTTAGCCTACAAGCAGTTTATCCCCAATGTGGCCGAGAAGACC 316
           |||||||||||||||||||||||||||||| ||||||||||||||
Db       1 CCTTTAGCCTACAAGCAGTTTATCCCCAAGGTGGCCGAGAAGACC 45


RESULT 8
AX146615/c
LOCUS       AX146615                  50 bp    DNA     linear   PAT 31-MAY-2001
DEFINITION  Sequence 77 from Patent WO0134654.
```

```
ACCESSION   AX146615
VERSION     AX146615.1  GI:14285008
KEYWORDS    .
SOURCE      human.
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 50)
  AUTHORS   Strauch,K.
  TITLE     Hedgehog fusion proteins and uses
  JOURNAL   Patent: WO 0134654-A 77 17-MAY-2001;
            BIOGEN, INC. (US)
FEATURES             Location/Qualifiers
     source          1. .50
                     /organism="Homo sapiens"
                     /db_xref="taxon:9606"
BASE COUNT        6 a     16 c     16 g     12 t
ORIGIN

  Query Match             2.7%;  Score 42;  DB 6;  Length 50;
  Best Local Similarity   90.0%;  Pred. No. 6.1e+04;
  Matches   45;  Conservative    0;  Mismatches    5;  Indels    0;  Gaps    0;

Qy     228 CGGGCAGGGGGTTCGGGAAGAGGAGGCACCCCAAAAAGCTGACCCCTTTA 277
           |||||||||||||||| ||  |  |||||||||||||||||||||||||
Db      50 CGGGCAGGGGGTTCGGGCAGCAGCAGCACCCCAAAAAGCTGACCCCTTTA 1


RESULT 9
AX146617/c
LOCUS       AX146617                 43 bp    DNA     linear   PAT 31-MAY-2001
DEFINITION  Sequence 79 from Patent WO0134654.
ACCESSION   AX146617
VERSION     AX146617.1  GI:14285010
KEYWORDS    .
SOURCE      human.
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 43)
  AUTHORS   Strauch,K.
  TITLE     Hedgehog fusion proteins and uses
  JOURNAL   Patent: WO 0134654-A 79 17-MAY-2001;
            BIOGEN, INC. (US)
FEATURES             Location/Qualifiers
     source          1. .43
                     /organism="Homo sapiens"
                     /db_xref="taxon:9606"
BASE COUNT        8 a     10 c     14 g     11 t
ORIGIN

  Query Match             2.6%;  Score 41.4;  DB 6;  Length 43;
  Best Local Similarity   97.7%;  Pred. No. 7.5e+04;
  Matches   42;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy     278 GCCTACAAGCAGTTTATCCCCAATGTGGCCGAGAAGACCCTAG 320
           |||||||||||||||| ||||||||||||||||||||||||||||
Db      43 GCCTACAAGCAGTTTCTCCCCAATGTGGCCGAGAAGACCCTAG 1


RESULT 10
AX146611
LOCUS       AX146611                 47 bp    DNA     linear   PAT 31-MAY-2001
DEFINITION  Sequence 73 from Patent WO0134654.
ACCESSION   AX146611
VERSION     AX146611.1  GI:14285004
KEYWORDS    .
SOURCE      human.
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 47)
  AUTHORS   Strauch,K.
  TITLE     Hedgehog fusion proteins and uses
  JOURNAL   Patent: WO 0134654-A 73 17-MAY-2001;
            BIOGEN, INC. (US)
FEATURES             Location/Qualifiers
     source          1. .47
                     /organism="Homo sapiens"
                     /db_xref="taxon:9606"
BASE COUNT        9 a     15 c     20 g      3 t
ORIGIN

  Query Match             2.6%;  Score 40.6;  DB 6;  Length 47;
  Best Local Similarity   91.5%;  Pred. No. 9.2e+04;
  Matches   43;  Conservative    0;  Mismatches    4;  Indels    0;  Gaps    0;

Qy     225 GACCGGGCAGGGGGTTCGGGAAGAGGAGGCACCCCAAAAAGCTGACC 271
           | |||||||||||||||||||||||||||||||||| |  ||||||||
Db       1 GCCCGGGCAGGGGGTTCGGGAAGAGGAGGCACCCCCAGCAGCTGACC 47


RESULT 11
AX146610
LOCUS       AX146610                 47 bp    DNA     linear   PAT 31-MAY-2001
DEFINITION  Sequence 72 from Patent WO0134654.
ACCESSION   AX146610
VERSION     AX146610.1  GI:14285003
KEYWORDS    .
SOURCE      human.
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 47)
  AUTHORS   Strauch,K.
  TITLE     Hedgehog fusion proteins and uses
  JOURNAL   Patent: WO 0134654-A 72 17-MAY-2001;
            BIOGEN, INC. (US)
FEATURES             Location/Qualifiers
     source          1. .47
                     /organism="Homo sapiens"
                     /db_xref="taxon:9606"
BASE COUNT       11 a     16 c     17 g      3 t
ORIGIN

  Query Match             2.4%;  Score 37.4;  DB 6;  Length 47;
  Best Local Similarity   87.2%;  Pred. No. 2.2e+05;
  Matches   41;  Conservative    0;  Mismatches    6;  Indels    0;  Gaps    0;

Qy     225 GACCGGGCAGGGGGTTCGGGAAGAGGAGGCACCCCAAAAAGCTGACC 271
           | ||||||||||||||||||  ||  |  ||||||||||||||||||
Db       1 GCCCGGGCAGGGGGTTCGGGCAGCAGCAGCACCCCAAAAAGCTGACC 47


RESULT 12
AX057285
LOCUS       AX057285                 50 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 16 from Patent WO0075329.
ACCESSION   AX057285
VERSION     AX057285.1  GI:12310031
KEYWORDS    .
SOURCE      synthetic construct.
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 50)
  AUTHORS   Levine,A.J., Mitterer,A., Falkner,F.G., Scheiflinger,F. and
            Dorner,F.
  TITLE     Targeted angiogenesis
  JOURNAL   Patent: WO 0075329-A 16 14-DEC-2000;
            Edwards Lifesciences Corporation (US) ; Baxter Aktiengesellschaft
            (AT)
FEATURES             Location/Qualifiers
     source          1. .50
                     /organism="synthetic construct"
                     /db_xref="taxon:32630"
                     /note="annealed oligonucleotide"
```

```
BASE COUNT        3 a     16 c     27 g      4 t
ORIGIN

  Query Match             2.0%;  Score 31.4;  DB 6;  Length 50;
  Best Local Similarity   85.4%;  Pred. No. 1.1e+06;
  Matches   35;  Conservative    0;  Mismatches    6;  Indels    0;  Gaps    0;

Qy   1341 GCGGCGGGGACAGCGGCGGCGGGGACCGCGGGGGCGGCGGC 1381
          ||||||| | |||||||||||| | | |||| |||||||||
Db      7 GCGGCGGCGGCAGCGGCGGCGGCGGCAGCGGCGGCGGCGGC 47


RESULT 13
HSA270316/c
LOCUS       HSA270316                27 bp    DNA     linear   PRI 26-JUL-2000
DEFINITION  Homo sapiens sonic hedgehog (Drosophila) homolog (SHH) antisense
            primer.
ACCESSION   AJ270316
VERSION     AJ270316.1  GI:9557893
KEYWORDS    .
SOURCE      human.
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 27)
  AUTHORS   Palm,K., Salin-Nordstrom,T., Levesque,M.F. and Neuman,T.
  TITLE     Fetal and adult human CNS stem cells have similar molecular
            characteristics and developmental potential
  JOURNAL   Brain Res. Mol. Brain Res. 78 (1-2), 192-195 (2000)
  MEDLINE   20351569
   PUBMED   10891600
REFERENCE   2  (bases 1 to 27)
  AUTHORS   Palm,K.
  TITLE     Direct Submission
  JOURNAL   Submitted (04-OCT-1999) Surgery, Cedars Sinai Medical Center, 8700
            Beverly Blvd., Los Angeles, CA 90048, US
COMMENT     Related entry: NM_000193.
FEATURES             Location/Qualifiers
     source          1. .27
                     /organism="Homo sapiens"
                     /db_xref="taxon:9606"
     misc_feature    1. .27
                     /note="PCR antisense primer for sonic hedgehog
                     (Drosophila) homolog (SHH)"
BASE COUNT        3 a     11 c      9 g      4 t
ORIGIN

  Query Match             1.7%;  Score 27;  DB 9;  Length 27;
  Best Local Similarity   100.0%;  Pred. No. 4.5e+06;
  Matches   27;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    755 TCGGCCACGGTGCACCTGGAGCAGGGC 781
          |||||||||||||||||||||||||||
Db     27 TCGGCCACGGTGCACCTGGAGCAGGGC 1


RESULT 14
AR178318
LOCUS       AR178318                 50 bp    DNA     linear   PAT 20-APR-2002
DEFINITION  Sequence 35 from patent US 6319672.
ACCESSION   AR178318
VERSION     AR178318.1  GI:20219456
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 50)
  AUTHORS   Crouzet,J., Scherman,D., Wils,P., Blanche,F. and Cameron,B.
  TITLE     Purification of a triple helix formation with an immobilized
            oligonucleotide
  JOURNAL   Patent: US 6319672-A 35 20-NOV-2001;
FEATURES             Location/Qualifiers
     source          1. .50
                     /organism="unknown"
BASE COUNT       25 a      0 c     25 g      0 t
ORIGIN

  Query Match             1.6%;  Score 26;  DB 6;  Length 50;
  Best Local Similarity   70.0%;  Pred. No. 5e+06;
  Matches   35;  Conservative    0;  Mismatches   15;  Indels    0;  Gaps    0;

Qy     19 GAGAGAGCGAGCGGGCGAGCCGGAGCGAGGAAGGGAAAGCGCAAGAGAGA 68
          ||||||| ||| | | |||   ||| |||  || || || |  |||||||
Db      1 GAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGA 50


RESULT 15
AX323400
LOCUS       AX323400                 50 bp    DNA     linear   PAT 07-JAN-2002
DEFINITION  Sequence 35 from Patent WO0192511.
ACCESSION   AX323400
VERSION     AX323400.1  GI:18094162
KEYWORDS    .
SOURCE      synthetic construct.
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Crouzet,J., Scherman,D., Wils,P., Blanche,F. and Cameron,B.
  TITLE     Purification of a triple helix formation with an immobilized
            oligonucleotide
  JOURNAL   Patent: WO 0192511-A 35 06-DEC-2001;
            Aventis Pharma (FR)
FEATURES             Location/Qualifiers
     source          1. .50
                     /organism="synthetic construct"
                     /db_xref="taxon:32630"
                     /note="synthetic oligonucleotide"
BASE COUNT       25 a      0 c     25 g      0 t
ORIGIN

  Query Match             1.6%;  Score 26;  DB 6;  Length 50;
  Best Local Similarity   70.0%;  Pred. No. 5e+06;
  Matches   35;  Conservative    0;  Mismatches   15;  Indels    0;  Gaps    0;

Qy     19 GAGAGAGCGAGCGGGCGAGCCGGAGCGAGGAAGGGAAAGCGCAAGAGAGA 68
          ||||||| ||| | | |||   ||| |||  || || || |  |||||||
Db      1 GAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGA 50


RESULT 16
I84406
LOCUS       I84406                   33 bp    DNA     linear   PAT 04-APR-1998
DEFINITION  Sequence 7 from patent US 5695933.
ACCESSION   I84406
VERSION     I84406.1  GI:3021926
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 33)
  AUTHORS   Schalling,M., Hudson,T.J. and Housman,D.E.
  TITLE     Direct detection of expanded nucleotide repeats in the human genome
  JOURNAL   Patent: US 5695933-A 7 09-DEC-1997;
FEATURES             Location/Qualifiers
     source          1. .33
                     /organism="unknown"
BASE COUNT        0 a     11 c     22 g      0 t
ORIGIN

  Query Match             1.6%;  Score 25;  DB 6;  Length 33;
  Best Local Similarity   84.8%;  Pred. No. 7.4e+06;
  Matches   28;  Conservative    0;  Mismatches    5;  Indels    0;  Gaps    0;

Qy   1351 CAGCGGCGGCGGGGACCGCGGGGGCGGCGGCGG 1383
          | |||||||||| | | |||| ||||||||||
Db      1 CGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 33
```

```
RESULT 17
AR199385
LOCUS       AR199385                  50 bp    DNA     linear   PAT 20-APR-2002
DEFINITION  Sequence 6 from patent US 6355434.
ACCESSION   AR199385
VERSION     AR199385.1  GI:20249459
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 50)
  AUTHORS   Drazen,J.M., In,K.-H., Asano,K., Beier,D. and Grobholz,J.
  TITLE     5-Lipoxygenase gene polymorphisms and their use in classifying
            patients
  JOURNAL   Patent: US 6355434-A 6 12-MAR-2002;
FEATURES             Location/Qualifiers
     source          1. .50
                     /organism="unknown"
BASE COUNT        6 a      10 c      32 g       2 t
ORIGIN

  Query Match             1.6%;  Score 24.6;  DB 6;  Length 50;
  Best Local Similarity   76.9%;  Pred. No. 7.4e+06;
  Matches   30;  Conservative    0;  Mismatches    9;  Indels    0;  Gaps    0;

Qy   1348 GGACAGCGGCGGCGGGGACCGCGGGGGCGGCGGCGGCAG 1386
          | || |||| ||||||| | | || || ||||| |||||
Db      6 GTACTGCGGGGGCGGGGGCGGGGGCGGGGGCGGGGGCAG 44


RESULT 18
AR063105
LOCUS       AR063105                  24 bp    DNA     linear   PAT 29-SEP-1999
DEFINITION  Sequence 43 from patent US 5844079.
ACCESSION   AR063105
VERSION     AR063105.1  GI:5990796
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 24)
  AUTHORS   Ingham,P.W., McMahon,A.P. and Tabin,C.J.
  TITLE     Vertebrate embryonic pattern-inducing proteins, and uses related
            thereto
  JOURNAL   Patent: US 5844079-A 43 01-DEC-1998;
FEATURES             Location/Qualifiers
     source          1. .24
                     /organism="unknown"
BASE COUNT        6 a       5 c      11 g       2 t
ORIGIN

  Query Match             1.5%;  Score 24;  DB 6;  Length 24;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+07;
  Matches   24;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    524 ACCGAGGGCTGGGACGAAGATGGC 547
          ||||||||||||||||||||||||
Db      1 ACCGAGGGCTGGGACGAAGATGGC 24


RESULT 19
AR122632
LOCUS       AR122632                  24 bp    DNA     linear   PAT 16-MAY-2001
DEFINITION  Sequence 43 from patent US 6165747.
ACCESSION   AR122632
VERSION     AR122632.1  GI:14106949
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 24)
  AUTHORS   Ingham,P.W., McMahon,A.P., Tabin,C.J., Bumcrot,D.A. and
            Marti-Gorostiza,E.
  TITLE     Nucleic acids encoding hedgehog proteins
  JOURNAL   Patent: US 6165747-A 43 26-DEC-2000;
FEATURES             Location/Qualifiers
     source          1. .24
                     /organism="unknown"
BASE COUNT        6 a       5 c      11 g       2 t
ORIGIN

  Query Match             1.5%;  Score 24;  DB 6;  Length 24;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+07;
  Matches   24;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    524 ACCGAGGGCTGGGACGAAGATGGC 547
          ||||||||||||||||||||||||
Db      1 ACCGAGGGCTGGGACGAAGATGGC 24


RESULT 20
AR164260
LOCUS       AR164260                  24 bp    DNA     linear   PAT 17-OCT-2001
DEFINITION  Sequence 43 from patent US 6271363.
ACCESSION   AR164260
VERSION     AR164260.1  GI:16235331
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 24)
  AUTHORS   Ingham,P.W., McMahon,A.P. and Tabin,C.J.
  TITLE     Nucleic acids encoding hedgehog proteins
  JOURNAL   Patent: US 6271363-A 43 07-AUG-2001;
FEATURES             Location/Qualifiers
     source          1. .24
                     /organism="unknown"
BASE COUNT        6 a       5 c      11 g       2 t
ORIGIN

  Query Match             1.5%;  Score 24;  DB 6;  Length 24;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+07;
  Matches   24;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    524 ACCGAGGGCTGGGACGAAGATGGC 547
          ||||||||||||||||||||||||
Db      1 ACCGAGGGCTGGGACGAAGATGGC 24


RESULT 21
AR208932
LOCUS       AR208932                  24 bp    DNA     linear   PAT 20-JUN-2002
DEFINITION  Sequence 43 from patent US 6384192.
ACCESSION   AR208932
VERSION     AR208932.1  GI:21510216
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 24)
  AUTHORS   Ingham,P.W., McMahon,A.P. and Tabin,C.J.
  TITLE     Vertebrate embryonic pattern-inducing proteins
  JOURNAL   Patent: US 6384192-A 43 07-MAY-2002;
FEATURES             Location/Qualifiers
     source          1. .24
                     /organism="unknown"
BASE COUNT        6 a       5 c      11 g       2 t
ORIGIN

  Query Match             1.5%;  Score 24;  DB 6;  Length 24;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+07;
  Matches   24;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    524 ACCGAGGGCTGGGACGAAGATGGC 547
```

```
                    ||||||||||||||||||||||||
Db       1 ACCGAGGGCTGGGACGAAGATGGC 24


RESULT 22
I20760
LOCUS       I20760                    45 bp    DNA     linear   PAT 07-OCT-1996
DEFINITION  Sequence 13 from patent US 5516637.
ACCESSION   I20760
VERSION     I20760.1  GI:1601115
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 45)
  AUTHORS   Huang,G.P., Rhode,P.R., Stinson,J.R. and Wong,H.C.
  TITLE     Method involving display of protein binding pairs on the surface of
            bacterial pili and bacteriophage
  JOURNAL   Patent: US 5516637-A 13 14-MAY-1996;
FEATURES             Location/Qualifiers
     source          1. .45
                     /organism="unknown"
BASE COUNT        2 a      9 c     25 g      9 t
ORIGIN

  Query Match             1.5%;  Score 24;  DB 6;  Length 45;
  Best Local Similarity   75.0%;  Pred. No. 8.9e+06;
  Matches   30;  Conservative    0;  Mismatches   10;  Indels    0;  Gaps    0;

Qy   1341 GCGGCGGGGACAGCGGCGGCGGGGACCGCGGGGGCGGCGG 1380
           | ||||| | ||||||||| || |    ||| ||||||||
Db      2 GTGGCGGTGGCAGCGGCGGTGGTGGTTCCGGAGGCGGCGG 41


RESULT 23
I84401/c
LOCUS       I84401                    30 bp    DNA     linear   PAT 04-APR-1998
DEFINITION  Sequence 2 from patent US 5695933.
ACCESSION   I84401
VERSION     I84401.1  GI:3021921
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 30)
  AUTHORS   Schalling,M., Hudson,T.J. and Housman,D.E.
  TITLE     Direct detection of expanded nucleotide repeats in the human genome
  JOURNAL   Patent: US 5695933-A 2 09-DEC-1997;
FEATURES             Location/Qualifiers
     source          1. .30
                     /organism="unknown"
BASE COUNT        0 a     20 c     10 g      0 t
ORIGIN

  Query Match             1.5%;  Score 23.6;  DB 6;  Length 30;
  Best Local Similarity   86.7%;  Pred. No. 1.1e+07;
  Matches   26;  Conservative    0;  Mismatches    4;  Indels    0;  Gaps    0;

Qy   1354 CGGCGGCGGGGACCGCGGGGGCGGCGGCGG 1383
           ||||||||| | | |||| ||||||||||
Db     30 CGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 1


RESULT 24
A01419/c
LOCUS       A01419                    31 bp    DNA     linear   PAT 28-APR-1993
DEFINITION  Malaria parasitic epitope (T-cell).
ACCESSION   A01419
VERSION     A01419.1  GI:344347
KEYWORDS    .
SOURCE      synthetic construct.
  ORGANISM  synthetic construct
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RESULT 25
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DEFINITION  Sequence 5 from Patent WO9720068.
ACCESSION   A62993
VERSION     A62993.1  GI:3716865
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SOURCE      unidentified.
  ORGANISM  unidentified
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REFERENCE   1  (bases 1 to 32)
  AUTHORS   Oerum,H. and Seeger,C.
  TITLE     METHOD FOR GENERATING MULTIPLE DOUBLE STRANDED NUCLEIC ACIDS
  JOURNAL   Patent: WO 9720068-A 5 05-JUN-1997;
            BOEHRINGER MANNHEIM GMBH (DE)
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Search completed: March 13, 2003, 23:14:50
Job time : 4408 secs
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OM nucleic - nucleic search, using sw model

Run on: March 13, 2003, 20:47:37 ; Search time 395 Seconds
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Title: US-10-001-844-3
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Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 2185239 seqs, 1125999159 residues

Total number of hits satisfying chosen parameters: 2166140

Minimum DB seq length: 0
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Post-processing: Minimum Match 0%
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Listing first 1000 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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c	4	45.2	2.9	50	22	AAD09081	Human oligonucleot
	5	43.8	2.8	47	22	AAD09073	Human oligonucleot
	6	43.8	2.8	47	22	AAD09074	Human oligonucleot
	7	43.4	2.8	45	22	AAD09077	Human oligonucleot
c	8	43.2	2.7	48	22	AAF27031	Human Sonic hedgeh
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c	10	42	2.7	50	22	AAD09080	Human oligonucleot
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	12	40.6	2.6	47	22	AAD09076	Human oligonucleot
	13	37.4	2.4	47	22	AAD09075	Human oligonucleot
c	14	37.2	2.4	42	22	AAF27032	Human Sonic hedgeh
c	15	37.2	2.4	42	22	AAF27036	Human Sonic hedgeh
c	16	36.4	2.3	38	22	AAF27039	Human Sonic hedgeh
c	17	36	2.3	49	22	AAF27025	Human Sonic hedgeh
c	18	35.8	2.3	39	22	AAF27038	Human Sonic hedgeh
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c	20	33.8	2.1	37	22	AAF27037	Human Sonic hedgeh
c	21	33.4	2.1	35	22	AAF27041	Human Sonic hedgeh
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	26	26	1.6	50	24	AAS21107	(GA)25 DNA purific
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	28	25	1.6	33	15	AAQ73441	Crohn's disease/ul
c	29	24.4	1.5	49	15	AAQ79189	Plasmodium falcipa
	30	24	1.5	24	16	AAQ91654	Human sonic hedgeh
	31	24	1.5	24	19	AAV18405	Human mutated soni
	32	24	1.5	24	22	AAH76132	Human Shh DNA ampl
	33	24	1.5	24	22	AAD10171	Human Sonic hedgeh
	34	24	1.5	24	22	AAC87097	PCR primer for cDN
	35	24	1.5	24	24	ABN87569	Human sonic hedgeh
	36	24	1.5	45	19	AAV54346	Modified pel B lea
	37	24	1.5	45	20	AAX55429	Primer to amplify
	38	24	1.5	48	13	AAQ33615	Microsatellite seq
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	40	23.6	1.5	48	21	AAC60679	Triplet repeat blo
c	41	23.4	1.5	25	19	AAV18406	Human mutated soni
	42	23.4	1.5	33	19	AAV62418	Human Sonic hedgeh
	43	23.4	1.5	49	13	AAQ33523	Sequence of micros
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c	45	22.6	1.4	50	21	AAC26760	Human secreted pro
c	46	22.4	1.4	32	24	ABK10414	Synthetic primer s
	47	22.2	1.4	36	13	AAQ28347	bGH N-terminus fra
	48	22.2	1.4	44	13	AAQ33577	Microsatellite seq
c	49	22.2	1.4	50	24	ABK47920	Vector multiclonin
	50	22	1.4	24	24	ABT03767	Human SHH gene PCR
c	51	22	1.4	29	21	AAA28861	Oligo linker for c
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c	53	22	1.4	29	24	AAK99702	Human sonic hedgeh
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c	59	21.6	1.4	50	24	ABK94536	Human BRCA1 gene,
	60	21.4	1.4	24	24	AAD34564	Shh specific forwa
c	61	21.4	1.4	31	24	ABK10413	Synthetic primer s
	62	21.4	1.4	45	21	AAA37204	Human PRO1347 hybr
	63	21.4	1.4	45	22	AAF54306	Probe #23 used in
	64	21.4	1.4	49	18	AAT80502	Hepatoma AS-30D Ty
	65	21.4	1.4	50	21	AAA76957	Human clone cg4265
	66	21.2	1.3	41	24	AAK99303	Human cancer suppr
	67	21.2	1.3	41	24	AAK99304	Human cancer suppr
c	68	21.2	1.3	45	24	ABK94442	Human BRCA1/hMLH1
	69	21.2	1.3	49	24	ABK47921	Vector multiclonin
	70	21.2	1.3	50	16	AAQ89058	VEGF 2'-NH2-RNA nu
	71	21.2	1.3	50	22	AAL30005	Human SNP oligonuc
c	72	21.2	1.3	50	22	AAL34654	Human SNP oligonuc
c	73	21.2	1.3	50	24	ABK94441	Human BRCA1 gene,
c	74	21	1.3	40	17	AAT03676	Hepatitis C diagno
	75	21	1.3	48	12	AAQ14203	Probe P1674 for Gi
	76	21	1.3	48	13	AAQ28517	Hypercalcaemia age
c	77	21	1.3	50	15	AAQ69624	Human bcl-2 proto-
c	78	21	1.3	50	18	AAV76464	Staphylococcus aur
c	79	21	1.3	50	18	AAT64086	Human B-cell leuke
c	80	21	1.3	50	20	AAX17374	Test sequence from
c	81	21	1.3	50	22	AAL29166	Human SNP oligonuc
	82	21	1.3	50	22	AAL31203	Human SNP oligonuc

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c	84	21	1.3	50	24	ABK82865	DNA binding molecu
c	85	20.8	1.3	40	24	ABK94443	Human BRCA1/hMLH1
	86	20.8	1.3	43	20	AAV80298	DNA encoding pepti
	87	20.8	1.3	46	19	AAV10422	CAT gene 5'-end an
c	88	20.8	1.3	46	19	AAV10422	CAT gene 5'-end an
	89	20.8	1.3	49	23	ABA10869	Tail adaptor oligo
c	90	20.8	1.3	50	17	AAT28823	PCR primer for HTR
	91	20.8	1.3	50	22	AAL31522	Human SNP oligonuc
	92	20.8	1.3	50	22	AAH89754	Human coding sequ
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c	94	20.6	1.3	45	21	AAC60682	Triplet repeat blo
	95	20.6	1.3	45	22	AAD04017	Synthetic linker D
	96	20.6	1.3	48	17	AAT06969	DNA encoding GM-CS
	97	20.6	1.3	49	18	AAT80501	Hepatoma AS-30D Ty
c	98	20.6	1.3	50	22	AAL28264	Human SNP oligonuc
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c	100	20.4	1.3	30	22	AAF99890	Immunostimulatory
c	101	20.4	1.3	30	24	ABK10411	Synthetic primer s
	102	20.4	1.3	30	24	ABK10417	Synthetic primer s
c	103	20.4	1.3	31	24	ABK87619	MALDI-TOF-MS analy
c	104	20.4	1.3	34	13	AAQ33761	Microsatellite seq
c	105	20.4	1.3	35	22	AAF99571	Immunostimulatory
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c	108	20.4	1.3	40	24	ABL41767	PCR primer used to
	109	20.4	1.3	41	16	AAQ89389	COX-2 oligonucleot
c	110	20.4	1.3	47	16	AAT05461	I-domain PCR prime
	111	20.4	1.3	49	18	AAT61251	Human antibody kap
c	112	20.4	1.3	49	23	ABA10851	Tail adaptor oligo
	113	20.4	1.3	50	18	AAV79438	Staphylococcus aur
	114	20.4	1.3	50	21	AAA38175	Primer used in ste
	115	20.4	1.3	50	22	AAL27861	Human SNP oligonuc
c	116	20.4	1.3	50	22	AAL34421	Human SNP oligonuc
	117	20.2	1.3	36	24	ABK15487	Urokinase plasmino
c	118	20.2	1.3	40	14	AAQ50877	HSV2 primer. Synt
	119	20.2	1.3	42	20	AAX35839	Antisense oligonuc
	120	20.2	1.3	46	15	AAQ69335	Human transmembran
	121	20.2	1.3	46	18	AAT63797	Human transmembran
	122	20.2	1.3	46	19	AAV10421	CAT gene 5'-end an
c	123	20.2	1.3	46	19	AAV10421	CAT gene 5'-end an
	124	20.2	1.3	46	20	AAX17085	Test sequence from
	125	20.2	1.3	46	24	ABK82576	DNA binding molecu
	126	20.2	1.3	48	20	AAX89502	PCR primer CIPCBD.
	127	20.2	1.3	48	20	AAZ31580	PCR primer for C.
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c	131	20.2	1.3	50	22	AAL29448	Human SNP oligonuc
c	132	20.2	1.3	50	22	AAL29798	Human SNP oligonuc
c	133	20.2	1.3	50	22	AAL29802	Human SNP oligonuc
	134	20	1.3	20	22	AAF87045	PCR primer for Shh
c	135	20	1.3	32	19	AAV62419	Human Sonic hedgeh
	136	20	1.3	36	13	AAQ33540	Microsatellite seq
	137	20	1.3	36	13	AAQ33597	Microsatellite seq
c	138	20	1.3	38	23	AAS13726	Simple sequence re
c	139	20	1.3	38	24	AAL45123	Oligonucleotide sy
c	140	20	1.3	42	20	AAX35839	Antisense oligonuc
	141	20	1.3	45	14	AAQ34598	Antisense probe fo
	142	20	1.3	45	21	AAC81272	Human/mouse histon
	143	20	1.3	45	21	AAC58253	Human PRO943 hybri
	144	20	1.3	45	21	AAZ65162	Probe specific for
	145	20	1.3	45	22	AAF44319	Human PRO943 hybri
	146	20	1.3	45	24	ABK11755	PRO943 cDNA specif
	147	20	1.3	45	24	ABK28594	Human PRO943 hybri
c	148	20	1.3	47	22	AAS13006	Optimal zinc bindi
	149	20	1.3	48	12	AAQ11624	Probe S3 complemen
c	150	20	1.3	50	18	AAT50946	Endoglycoceramidas
	151	19.8	1.3	38	12	AAQ13203	SP1X2S oligonucleo
	152	19.8	1.3	39	18	AAT87242	IL-4 2'NH2 RNA lig
	153	19.8	1.3	39	18	AAT87238	IL-4 2'NH2 RNA lig
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	155	19.8	1.3	39	18	AAT87229	IL-4 2'NH2 RNA lig
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	157	19.8	1.3	47	21	AAZ67690	Human map-related
	158	19.8	1.3	47	21	AAZ68205	Human map-related
c	159	19.8	1.3	47	23	AAH88364	CNS disorder-relat
	160	19.8	1.3	48	24	ABQ75860	Plasmid pFab sfiIL
c	161	19.8	1.3	50	22	AAL28998	Human SNP oligonuc
	162	19.8	1.3	50	22	AAD19759	Human granulocyte
c	163	19.6	1.2	45	21	AAA47006	PCR primer for DNA
	164	19.6	1.2	46	21	AAZ98490	H. discus derived
	165	19.6	1.2	47	15	AAQ68336	Diabody mutagenesi
c	166	19.6	1.2	48	22	AAD13086	Oligo DEVD-2 for c
	167	19.6	1.2	48	24	ABK97936	DNA encoding IFN-C
c	168	19.6	1.2	50	18	AAT73782	Multiplex short-PC
c	169	19.4	1.2	36	20	AAX79322	Human Lymphocytic
c	170	19.4	1.2	37	23	AAH77140	DRA adapter 2 olig
	171	19.4	1.2	39	12	AAQ12191	Probe derived from
	172	19.4	1.2	39	22	AAF27023	Human Sonic hedgeh
	173	19.4	1.2	43	18	AAT78827	Gamma heavy chain
	174	19.4	1.2	43	19	AAV39268	Primer O-529 used
	175	19.4	1.2	43	20	AAZ22022	Oligonucleotide us
	176	19.4	1.2	45	16	AAQ99068	(Ser4Gly)2 linker
	177	19.4	1.2	45	21	AAA12866	DNA encoding (Ser4
	178	19.4	1.2	46	22	AAF76771	Thermus terminator
	179	19.4	1.2	48	17	AAT06971	DNA encoding GM-CS
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	183	19.4	1.2	50	22	AAD11599	Non-target oligo h
	184	19.2	1.2	24	21	AAA27226	Forward PCR primer
	185	19.2	1.2	24	21	AAA30347	Sonic hedgehog mRN
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	187	19.2	1.2	24	24	AAI67720	Receptor Shh cDNA
	188	19.2	1.2	33	22	AAS44168	Neisseria meningit
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	190	19.2	1.2	36	14	AAQ43268	Sequence of mPC1 p
	191	19.2	1.2	36	24	ABK15479	Urokinase plasmino
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	195	19.2	1.2	41	19	AAV37415	Oligonucleotide se
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	197	19.2	1.2	41	24	ABA05600	Human ribosomal pr
	198	19.2	1.2	41	24	ABA05601	Human ribosomal pr
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c	202	19.2	1.2	45	15	AAQ70687	Purine rich region
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c	204	19.2	1.2	45	22	AAF67664	Xenopus insulator
	205	19.2	1.2	46	19	AAV33368	Nucleotide sequenc
c	206	19.2	1.2	47	15	AAQ63171	Primer for alpha 1
c	207	19.2	1.2	47	22	AAF24211	Human alpha-1 adre
	208	19.2	1.2	48	23	ABK07442	Human NOGO Amberzy
c	209	19.2	1.2	49	15	AAQ69655	Human adenosine de
c	210	19.2	1.2	49	18	AAT64117	Human adenosine de
c	211	19.2	1.2	49	20	AAX17405	Test sequence from
c	212	19.2	1.2	49	22	AAH50317	Bacterial 23S/5S R
c	213	19.2	1.2	49	24	ABK82896	DNA binding molecu
	214	19.2	1.2	50	20	AAX99196	M. fortuitum 16S r
	215	19.2	1.2	50	20	AAX99197	M. sorofulaceum 16
	216	19.2	1.2	50	20	AAX99198	M. smegmatis 16S r
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	226	19	1.2	19	22	AAH45477	PCR primer Shh-U1
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	249	19	1.2	44	21	AAC96956
	250	19	1.2	45	16	AAT04813
c	251	19	1.2	45	19	AAV54225
c	252	19	1.2	45	20	AAX55307
	253	19	1.2	45	22	AAI79904
	254	19	1.2	46	15	AAQ68290
	255	19	1.2	47	20	AAX56654
	256	19	1.2	48	22	AAD06907
c	257	19	1.2	50	18	AAT73770
c	258	19	1.2	50	22	AAL28935
	259	19	1.2	50	22	AAL30665
	260	19	1.2	50	22	AAL30666
	261	19	1.2	50	22	AAL31601
c	262	19	1.2	50	22	AAL33627
c	263	19	1.2	50	22	AAL33628
	264	18.8	1.2	31	22	AAI30620
c	265	18.8	1.2	32	22	AAF24860
	266	18.8	1.2	34	11	AAQ05011
	267	18.8	1.2	34	14	AAQ36325
	268	18.8	1.2	34	14	AAQ36326
	269	18.8	1.2	38	19	AAV31478
	270	18.8	1.2	38	21	AAZ37860
c	271	18.8	1.2	39	22	AAF25074
c	272	18.8	1.2	39	22	AAF74379
	273	18.8	1.2	40	20	AAV64755
	274	18.8	1.2	40	21	AAZ96151
	275	18.8	1.2	40	22	AAH24767
c	276	18.8	1.2	40	23	AAH77135
	277	18.8	1.2	41	15	AAQ62419
	278	18.8	1.2	41	24	ABL41574
c	279	18.8	1.2	42	18	AAT47461
c	280	18.8	1.2	42	21	AAA05761
	281	18.8	1.2	42	23	AAH77126
	282	18.8	1.2	43	16	AAQ81075
	283	18.8	1.2	43	18	AAT70014
	284	18.8	1.2	43	19	AAV31116
	285	18.8	1.2	43	21	AAZ44243
	286	18.8	1.2	44	16	AAQ83198
	287	18.8	1.2	45	12	AAQ11829
c	288	18.8	1.2	45	22	AAF67665
c	289	18.8	1.2	45	22	AAF67666
c	290	18.8	1.2	45	22	AAF67668
c	291	18.8	1.2	47	20	AAV64736
c	292	18.8	1.2	47	22	AAH24748
	293	18.8	1.2	48	15	AAQ54639
	294	18.8	1.2	48	18	AAT97589
	295	18.8	1.2	48	21	AAZ36788
	296	18.8	1.2	48	23	ABA09828
	297	18.8	1.2	48	23	ABA10959
	298	18.8	1.2	49	23	ABA10699
	299	18.8	1.2	49	23	ABA10720
	300	18.8	1.2	49	23	ABA10868
c	301	18.8	1.2	50	20	AAX52199

Soluble sc-TCR fus
Soluble sc-TCR fus
Oligo linker for c
Human oligonucleot
Human sonic hedgeh
Thermus thermophil
Primer 345, for am
Human PDE7A1 3' UT
Human insulin codi
Nucleotide sequenc
Plasmid pGemT-tbpB
Promoter replaceme
Sense oligonucleot
Human antibody ONS
Chimaeric human/mu
Primer for 5' end
Plasmid pVAC-1stc
Antibody H chain V
Clone #5 fragment
PCR primer VH1aF5.
PCR primer VH1aF5
B.stearothermophil
T-cell receptor V-
Soluble sc-TCR fus
Mutant preproricin
Diabody MAK195 pri
Primer 27. Synthe
Human oligo 14 to
Multiplex short-PC
Human SNP oligonuc
Human SNP oligonuc
Human SNP oligonuc
Human SNP oligonuc
Human SNP oligonuc
Human SNP oligonuc
Human single nucle
PCR primer for cDN
Sequence binding t
NGFR5par, targette
NGFR5anti, targett
PCR primer HSU4598
Crossover junction
Nucleotide sequenc
Pig3 response elem
HIV anti-viral oli
Polynucleotide seq
Nucleotide sequenc
DRA adapter 1 olig
Vector pVAC1 const
Probe #2 relating
Foldback triplex f
Human growth hormo
HLA adapter oligon
supF gene triplex
Triplex-forming ol
H chain variable r
Murine CD4/CD34 re
Synthetic nucleoti
Probe to minisatel
Xenopus insulator
Xenopus insulator
Xenopus insulator
HIV anti-viral oli
Nucleotide sequenc
Probe 679 to A1 ad
Shigella flexneri
PCR primer used to
Primer #9 from pri
Tail adaptor oligo
Tail adaptor oligo
Tail adaptor oligo
Tail adaptor oligo
Synthetic plasmid

c	302	18.8	1.2	50	21	AAA53010
c	303	18.8	1.2	50	22	AAL28815
c	304	18.8	1.2	50	22	AAL29447
c	305	18.8	1.2	50	22	AAL29797
c	306	18.8	1.2	50	22	AAL29801
c	307	18.8	1.2	50	22	AAL33727
c	308	18.8	1.2	50	22	AAL34059
	309	18.8	1.2	50	22	AAL34589
	310	18.8	1.2	50	24	ABQ72370
	311	18.6	1.2	25	15	AAQ55856
	312	18.6	1.2	25	16	AAQ85271
	313	18.6	1.2	25	20	AAX05267
c	314	18.6	1.2	28	20	AAZ11432
	315	18.6	1.2	28	21	AAZ43855
c	316	18.6	1.2	34	24	ABL56849
	317	18.6	1.2	36	22	AAF23429
	318	18.6	1.2	38	14	AAQ47082
	319	18.6	1.2	38	22	AAF28348
	320	18.6	1.2	40	22	AAS11890
	321	18.6	1.2	42	13	AAQ33587
	322	18.6	1.2	43	22	AAF25888
c	323	18.6	1.2	43	22	AAC86366
	324	18.6	1.2	44	17	AAT33029
	325	18.6	1.2	44	20	AAX78848
	326	18.6	1.2	44	20	AAX77433
	327	18.6	1.2	44	21	AAC96961
	328	18.6	1.2	45	20	AAX52474
	329	18.6	1.2	45	21	AAC81274
c	330	18.6	1.2	45	21	AAC58253
	331	18.6	1.2	45	21	AAC58432
c	332	18.6	1.2	45	21	AAZ65162
	333	18.6	1.2	45	22	AAF30752
c	334	18.6	1.2	45	22	AAF30753
	335	18.6	1.2	45	22	AAF72632
c	336	18.6	1.2	45	22	AAF44319
c	337	18.6	1.2	45	24	ABK11755
c	338	18.6	1.2	45	24	ABK28594
c	339	18.6	1.2	46	15	AAQ80661
c	340	18.6	1.2	46	20	AAX25415
	341	18.6	1.2	47	13	AAQ30484
	342	18.6	1.2	47	20	AAX55789
	343	18.6	1.2	48	22	AAD13085
c	344	18.6	1.2	49	21	AAC69816
c	345	18.6	1.2	49	23	ABA09825
	346	18.6	1.2	49	23	ABA10719
c	347	18.6	1.2	49	23	ABA10989
c	348	18.6	1.2	50	15	AAQ69713
c	349	18.6	1.2	50	18	AAT73798
c	350	18.6	1.2	50	18	AAT64175
c	351	18.6	1.2	50	19	AAV49719
	352	18.6	1.2	50	20	AAX99193
	353	18.6	1.2	50	20	AAX99194
	354	18.6	1.2	50	20	AAX52139
c	355	18.6	1.2	50	20	AAX17463
c	356	18.6	1.2	50	21	AAA76763
	357	18.6	1.2	50	22	AAL28867
c	358	18.6	1.2	50	22	AAL29985
	359	18.6	1.2	50	22	AAL31975
	360	18.6	1.2	50	22	AAL32200
c	361	18.6	1.2	50	22	AAL33786
c	362	18.6	1.2	50	22	AAL34150
	363	18.6	1.2	50	22	AAL34161
	364	18.6	1.2	50	22	AAL34195
	365	18.6	1.2	50	22	AAL34645
c	366	18.6	1.2	50	22	AAI73792
c	367	18.6	1.2	50	24	ABK82954
	368	18.4	1.2	20	19	AAV62410
c	369	18.4	1.2	20	22	AAF87046
c	370	18.4	1.2	28	22	AAF99570
c	371	18.4	1.2	28	24	ABL38794
c	372	18.4	1.2	33	20	AAX55438
c	373	18.4	1.2	33	21	AAZ94979
	374	18.4	1.2	33	22	AAF67671

Aspergillus niger
Human SNP oligonuc
Human SNP oligonuc
Human SNP oligonuc
Human SNP oligonuc
Human SNP oligonuc
Human SNP oligonuc
Human SNP oligonuc
PCR primer MHV-Bac
Fragile X probe.
Probe for Fragile
Fragile X chromoso
Synthetic PGK prom
Human IgG4 heavy c
Peptide vector des
Reverse PCR primer
HIV ENV gene PCR p
Streptomyces livid
Monoscaffold antib
Downstream sequenc
Primer #2 used in
Linker used to mak
Antibody H chain V
Paraquat binding a
PCR primer VH4cF5.
PCR primer VH4cF5
Probe used to iso
Human/mouse histon
Human PRO943 hybri
Human PRO332 (UNQ2
Probe specific for
Rat brain factor-1
Rat brain factor-1
Human PRO polypept
Human PRO943 hybri
PRO943 cDNA specif
Human PRO943 hybri
CC49 V-light prime
Anti-TAG-72 MAb CC
Oligonucleotide co
Stable cruciform m
Oligo DEVD-1 for c
E. coli ebgR SELEX
Primer #6 from pri
Tail adaptor oligo
Tail adaptor oligo
Human insulin-like
Multiplex short-PC
Human insulin-like
Plasmid pSLHirKR1
M. tuberculosis 16
M. bovis 16S rRNA
Synthetic plasmid
Test sequence from
Human clone cg3212
Human SNP oligonuc
Human SNP oligonuc
Human SNP oligonuc
Human SNP oligonuc
Human SNP oligonuc
Human SNP oligonuc
Human SNP oligonuc
Human SNP oligonuc
Human SNP oligonuc
Human silent SNP c
DNA binding molecu
Human Desert hedge
PCR primer for Shh
Immunostimulatory
Immunostimulatory
Soluble sc-TCR fus
Primer KC176 used
Chicken insulator

	375	18.4	1.2	36	24	AAL39105	Antibody screening
	376	18.4	1.2	36	24	AAL39118	Antibody screening
c	377	18.4	1.2	39	21	AAZ94974	Primer JSS33(B) us
c	378	18.4	1.2	40	13	AAQ25030	Oligonucleotide sp
c	379	18.4	1.2	40	13	AAQ25029	Oligonucleotide sp
	380	18.4	1.2	40	21	AAZ96048	Polynucleotide seq
c	381	18.4	1.2	41	19	AAV51224	Maize polymorphic
	382	18.4	1.2	44	19	AAV11503	A. niger transposa
	383	18.4	1.2	44	21	AAZ34476	E. coli formate de
	384	18.4	1.2	44	22	AAC87576	E. coli fdh seleno
	385	18.4	1.2	45	17	AAT42435	GD domain region f
	386	18.4	1.2	45	20	AAX80091	Human PRO347 probe
	387	18.4	1.2	45	21	AAA46921	Probe used to scre
	388	18.4	1.2	45	21	AAA49497	Probe for cDNA enc
	389	18.4	1.2	45	21	AAZ36382	PCR primer DP47baN
	390	18.4	1.2	45	22	AAD16117	Human scFv gene VH
	391	18.4	1.2	45	24	ABK11184	DNA encoding Bipla
	392	18.4	1.2	45	24	ABA82885	Human protective D
	393	18.4	1.2	47	19	AAV49716	Plasmid pSLHirK1 o
c	394	18.4	1.2	47	19	AAV49717	Plasmid pSLHirK1 o
c	395	18.4	1.2	47	22	AAH26376	Mollusc acetylchol
	396	18.4	1.2	47	24	AAI72452	C7 coding region p
c	397	18.4	1.2	48	16	AAQ80730	Bombyx mori pBMHPC
c	398	18.4	1.2	48	19	AAV18209	Codon optimised si
c	399	18.4	1.2	48	22	AAL29496	Human SNP oligonuc
	400	18.4	1.2	48	22	AAS13891	Nodavirus RNA1 PCR
c	401	18.4	1.2	48	22	AAD13092	Oligo DEVA-2 for c
	402	18.4	1.2	49	15	AAQ69655	Human adenosine de
	403	18.4	1.2	49	18	AAT64117	Human adenosine de
	404	18.4	1.2	49	20	AAX17405	Test sequence from
	405	18.4	1.2	49	22	AAS13008	HIV-1 zinc binding
	406	18.4	1.2	49	23	ABA10640	Tail adaptor oligo
c	407	18.4	1.2	49	23	ABA10863	Tail adaptor oligo
	408	18.4	1.2	49	24	ABK82896	DNA binding molecu
	409	18.4	1.2	50	15	AAQ69731	Human ubiquitin-li
c	410	18.4	1.2	50	15	AAQ69376	Human erythropoiet
c	411	18.4	1.2	50	18	AAT76096	Human histidine de
	412	18.4	1.2	50	18	AAT64193	Human ubiquitin-li
c	413	18.4	1.2	50	18	AAT63838	Human erythropoiet
c	414	18.4	1.2	50	20	AAX53907	Histidine decarbox
	415	18.4	1.2	50	20	AAX17481	Test sequence from
c	416	18.4	1.2	50	20	AAX17126	Test sequence from
c	417	18.4	1.2	50	21	AAF19472	Human histidine de
c	418	18.4	1.2	50	21	AAA33350	Low adenosine anti
	419	18.4	1.2	50	22	AAL27894	Human SNP oligonuc
c	420	18.4	1.2	50	22	AAL28817	Human SNP oligonuc
c	421	18.4	1.2	50	22	AAL28896	Human SNP oligonuc
c	422	18.4	1.2	50	22	AAL29890	Human SNP oligonuc
	423	18.4	1.2	50	22	AAL30113	Human SNP oligonuc
	424	18.4	1.2	50	22	AAL30376	Human SNP oligonuc
c	425	18.4	1.2	50	22	AAL33675	Human SNP oligonuc
	426	18.4	1.2	50	22	AAL34180	Human SNP oligonuc
	427	18.4	1.2	50	22	AAL34303	Human SNP oligonuc
c	428	18.4	1.2	50	22	AAL34566	Human SNP oligonuc
	429	18.4	1.2	50	22	AAI78855	Human silent SNP c
c	430	18.4	1.2	50	23	ABL01021	Human SNP involvin
c	431	18.4	1.2	50	24	ABK82617	DNA binding molecu
	432	18.4	1.2	50	24	ABK82972	DNA binding molecu
c	433	18.4	1.2	50	24	ABK22703	Ets related gene (
c	434	18.4	1.2	50	24	ABK13347	Human transcriptio
	435	18.2	1.2	24	17	AAX15200	Central region seq
c	436	18.2	1.2	25	19	AAV59458	Hedgehog protein d
	437	18.2	1.2	31	22	AAH78572	Probe used to dete
	438	18.2	1.2	31	22	AAI31038	Human single nucle
	439	18.2	1.2	32	14	AAQ52007	B-cell mRNA ribozy
	440	18.2	1.2	34	19	AAV62416	Human Desert hedge
c	441	18.2	1.2	35	19	AAV36067	Oligonucleotide CB
	442	18.2	1.2	39	17	AAT35018	TIMP-1/fibronectin
	443	18.2	1.2	39	18	AAT86948	Primer used in MHC
	444	18.2	1.2	39	18	AAT87251	IL-4 2'NH2 RNA lig
	445	18.2	1.2	39	18	AAT87228	IL-4 2'NH2 RNA lig
c	446	18.2	1.2	40	14	AAQ50264	HIV env INS mutage
	447	18.2	1.2	40	21	AAZ95854	Polynucleotide seq
c	448	18.2	1.2	40	21	AAZ96142	Polynucleotide seq
c	449	18.2	1.2	40	22	AAF86312	PCR primer for amp
	450	18.2	1.2	41	15	AAQ62423	Vector pVAC1 const
	451	18.2	1.2	41	24	ABL56705	Probe #1 for human
	452	18.2	1.2	42	16	AAQ99066	(Gly4Ser)2 linker
	453	18.2	1.2	42	21	AAA12864	DNA encoding (Gly4
	454	18.2	1.2	42	21	AAA05766	Human growth hormo
	455	18.2	1.2	42	22	AAF74252	DNA analysis metho
c	456	18.2	1.2	43	24	ABL99298	Synthetic Renilla
	457	18.2	1.2	45	20	AAX82033	Mouse heavy chain
	458	18.2	1.2	45	20	AAX05564	Mouse heavy chain
	459	18.2	1.2	46	15	AAQ69434	Human heat shock p
	460	18.2	1.2	46	18	AAT63896	Human hsp70B gene
	461	18.2	1.2	46	20	AAX17184	Test sequence from
	462	18.2	1.2	46	24	ABK82675	DNA binding molecu
c	463	18.2	1.2	47	19	AAV44007	Human Mab #117/10C
c	464	18.2	1.2	47	21	AAZ67614	Human map-related
	465	18.2	1.2	47	21	AAZ69138	Human map-related
	466	18.2	1.2	47	23	ABA09881	Primer #62 from pr
	467	18.2	1.2	48	22	AAH97435	Human Chk1 ribozym
	468	18.2	1.2	48	22	AAF28330	eryAI gene KS1 seg
c	469	18.2	1.2	48	24	ABK15480	Urokinase plasmino
c	470	18.2	1.2	49	23	ABA10701	Tail adaptor oligo
	471	18.2	1.2	49	23	ABA10718	Tail adaptor oligo
	472	18.2	1.2	49	23	ABA10770	Tail adaptor oligo
	473	18.2	1.2	50	15	AAQ69581	Human non-histone
c	474	18.2	1.2	50	18	AAT85081	Human cytomegalovi
c	475	18.2	1.2	50	18	AAT73788	Multiplex short-PC
c	476	18.2	1.2	50	18	AAT73776	Multiplex short-PC
c	477	18.2	1.2	50	18	AAT73764	Multiplex short-PC
	478	18.2	1.2	50	18	AAT64043	Human non-histone
	479	18.2	1.2	50	20	AAX99200	M. intracellulare
	480	18.2	1.2	50	20	AAX99201	M. simium 16S rRNA
c	481	18.2	1.2	50	20	AAX80341	HCV NS4A-NS3 compl
c	482	18.2	1.2	50	20	AAX52094	Synthetic plasmid
	483	18.2	1.2	50	20	AAX17331	Test sequence from
	484	18.2	1.2	50	21	AAA77403	Human clone cg4492
c	485	18.2	1.2	50	22	AAL29583	Human SNP oligonuc
	486	18.2	1.2	50	22	AAL30020	Human SNP oligonuc
c	487	18.2	1.2	50	22	AAL31893	Human SNP oligonuc
c	488	18.2	1.2	50	22	AAL32412	Human SNP oligonuc
c	489	18.2	1.2	50	22	AAL34106	Human SNP oligonuc
	490	18.2	1.2	50	22	AAL34326	Human SNP oligonuc
c	491	18.2	1.2	50	22	AAL34565	Human SNP oligonuc
c	492	18.2	1.2	50	22	AAI78241	Human silent SNP c
c	493	18.2	1.2	50	22	AAH79788	Human DNA containi
	494	18.2	1.2	50	24	ABK82822	DNA binding molecu
c	495	18	1.1	18	22	AAH45474	PCR primer Shh-D s
	496	18	1.1	27	19	AAV94470	Canine IL-2 recept
	497	18	1.1	27	20	AAX55044	C/EBP-beta antisen
	498	18	1.1	27	21	AAF20613	Human C/EBP polynu
	499	18	1.1	27	21	AAA34491	Human adenosine re
	500	18	1.1	28	20	AAX55043	C/EBP-beta antisen
	501	18	1.1	28	21	AAF20612	Human C/EBP polynu
	502	18	1.1	28	21	AAA34490	Human adenosine re
	503	18	1.1	29	20	AAX55042	C/EBP-beta antisen
	504	18	1.1	29	21	AAF20611	Human C/EBP polynu
	505	18	1.1	29	21	AAA34489	Human adenosine re
	506	18	1.1	30	20	AAX55041	C/EBP-beta antisen
	507	18	1.1	30	21	AAF20610	Human C/EBP polynu
	508	18	1.1	30	21	AAA34488	Human adenosine re
	509	18	1.1	31	20	AAX55040	C/EBP-beta antisen
	510	18	1.1	31	21	AAF20609	Human C/EBP polynu
	511	18	1.1	31	21	AAA34487	Human adenosine re
	512	18	1.1	32	20	AAX55039	C/EBP-beta antisen
	513	18	1.1	32	21	AAF20608	Human C/EBP polynu
	514	18	1.1	32	21	AAA34486	Human adenosine re
	515	18	1.1	33	20	AAX55038	C/EBP-beta antisen
	516	18	1.1	33	21	AAF20607	Human C/EBP polynu
	517	18	1.1	33	21	AAA34485	Human adenosine re
c	518	18	1.1	33	24	AAS17985	Human zinc finger
	519	18	1.1	34	20	AAX55037	C/EBP-beta antisen
	520	18	1.1	34	21	AAF20606	Human C/EBP polynu

	521	18	1.1	34	21	AAA34484
	522	18	1.1	35	20	AAX89879
	523	18	1.1	35	20	AAX55036
	524	18	1.1	35	20	AAX55061
	525	18	1.1	35	20	AAV99232
	526	18	1.1	35	21	AAF20605
	527	18	1.1	35	21	AAF20630
	528	18	1.1	35	21	AAA72503
	529	18	1.1	35	21	AAA34483
	530	18	1.1	35	21	AAA34508
c	531	18	1.1	36	15	AAQ73470
c	532	18	1.1	36	19	AAV60887
	533	18	1.1	36	20	AAX55035
	534	18	1.1	36	21	AAF20604
	535	18	1.1	36	21	AAA34482
c	536	18	1.1	36	21	AAA35819
c	537	18	1.1	36	22	AAS11896
	538	18	1.1	38	12	AAQ14201
	539	18	1.1	39	19	AAV21265
	540	18	1.1	40	22	AAF28274
	541	18	1.1	41	15	AAQ62421
	542	18	1.1	41	19	AAV51143
c	543	18	1.1	41	19	AAV47941
	544	18	1.1	41	22	AAH75556
	545	18	1.1	42	14	AAQ34777
	546	18	1.1	42	16	AAQ83950
	547	18	1.1	42	17	AAT34411
c	548	18	1.1	42	21	AAZ48717
	549	18	1.1	42	24	ABN83751
	550	18	1.1	43	19	AAV43085
	551	18	1.1	43	20	AAX01003
	552	18	1.1	43	24	AAD24760
	553	18	1.1	44	24	ABI82368
	554	18	1.1	45	16	AAQ74158
	555	18	1.1	45	22	AAF67664
	556	18	1.1	46	18	AAT69251
c	557	18	1.1	46	18	AAT87195
	558	18	1.1	46	20	AAX37822
	559	18	1.1	47	20	AAX56656
c	560	18	1.1	47	23	AAH88681
	561	18	1.1	48	15	AAQ69453
c	562	18	1.1	48	16	AAQ80731
	563	18	1.1	48	18	AAT63915
	564	18	1.1	48	20	AAX17203
	565	18	1.1	48	21	AAC63541
	566	18	1.1	48	21	AAC64499
c	567	18	1.1	48	22	AAS13890
	568	18	1.1	48	22	AAH22251
	569	18	1.1	48	22	AAH20116
	570	18	1.1	48	24	ABK82694
	571	18	1.1	49	13	AAQ33591
	572	18	1.1	49	23	ABA10665
	573	18	1.1	49	23	ABA10688
c	574	18	1.1	49	24	AAL43078
c	575	18	1.1	50	15	AAQ69724
	576	18	1.1	50	15	AAQ69624
	577	18	1.1	50	18	AAT76083
c	578	18	1.1	50	18	AAT73762
	579	18	1.1	50	18	AAT65741
	580	18	1.1	50	18	AAT59919
c	581	18	1.1	50	18	AAT64186
	582	18	1.1	50	18	AAT64086
	583	18	1.1	50	20	AAX53891
c	584	18	1.1	50	20	AAX17474
	585	18	1.1	50	20	AAX17374
	586	18	1.1	50	21	AAF19456
	587	18	1.1	50	21	AAA59749
	588	18	1.1	50	21	AAA33334
c	589	18	1.1	50	22	AAL28011
	590	18	1.1	50	22	AAL28644
c	591	18	1.1	50	22	AAL28816
c	592	18	1.1	50	22	AAL30158
	593	18	1.1	50	22	AAL30651

Human adenosine re
Monoclonal antibod
C/EBP-beta antisen
C/EBP-beta antisen
PCR primer used to
Human C/EBP polynu
Human C/EBP polynu
Degenerative oligo
Human adenosine re
Human adenosine re
Porcine interleuki
Oligonucleotide 91
C/EBP-beta antisen
Human C/EBP polynu
Human adenosine re
Permutein linker e
PCR primer PVX fla
Probe P1672 for Gi
Tissue plasminogen
Part of PsaA gene
Vector pVAC1 const
Maize polymorphic
Maize polymorphic
Human cathepsin 29
Multiple cloning s
Oligonucleotide cl
Oligonucleotide 33
PCR primer EGRE7 f
Oligonucleotide us
Amplification prim
Error prone PCR pr
Human immunodefici
p53 mutation detec
Mouse heavy chain
Xenopus insulator
Flt-1 gene probe A
Interleukin-4 2'F
Primer 7. Synthet
Primer 29. Synthe
CNS disorder-relat
Human rearranged k
Bombyx mori pBMHPC
Human rearranged k
Test sequence from
Mutagenic primer 8
Ecotin site direct
Nodavirus RNA1 PCR
Anti-A33 antigen a
Rabbit anti A33 an
DNA binding molecu
Microsatellite seq
Tail adaptor oligo
Tail adaptor oligo
Regulatable, catal
Human epidermal gr
Human bcl-2 proto-
Human IgE receptor
Multiplex short-PC
Repeat sequence fr
Oligonucleotide pr
Human epidermal gr
Human B-cell leuke
Human IgE receptor
Test sequence from
Test sequence from
Human IgE receptor
Oligomer I used to
Low adenosine anti
Human SNP oligonuc
Human SNP oligonuc
Human SNP oligonuc
Human SNP oligonuc
Human SNP oligonuc

	594	18	1.1	50	22	AAL31846
	595	18	1.1	50	22	AAL33721
c	596	18	1.1	50	22	AAL34403
c	597	18	1.1	50	22	AAI76329
c	598	18	1.1	50	22	AAI76871
	599	18	1.1	50	24	ABK82865
c	600	18	1.1	50	24	ABK82965
c	601	17.8	1.1	21	21	AAA95383
c	602	17.8	1.1	21	21	AAZ49111
c	603	17.8	1.1	29	23	ABL52929
	604	17.8	1.1	30	18	AAT93621
c	605	17.8	1.1	30	23	ABL53308
	606	17.8	1.1	31	22	AAI29637
	607	17.8	1.1	31	22	AAI30188
	608	17.8	1.1	31	22	AAI30471
c	609	17.8	1.1	32	18	AAT46190
c	610	17.8	1.1	32	20	AAV83776
	611	17.8	1.1	33	19	AAV26185
	612	17.8	1.1	34	21	AAA12122
c	613	17.8	1.1	36	21	AAA35862
	614	17.8	1.1	38	23	ABL58030
	615	17.8	1.1	39	22	AAS45570
c	616	17.8	1.1	39	22	AAH74434
	617	17.8	1.1	39	22	AAH20260
c	618	17.8	1.1	39	23	ABL58031
c	619	17.8	1.1	40	19	AAV15508
c	620	17.8	1.1	40	22	AAF28723
c	621	17.8	1.1	41	19	AAV47702
c	622	17.8	1.1	41	24	ABL41373
	623	17.8	1.1	41	24	ABA04239
	624	17.8	1.1	42	19	AAV23585
	625	17.8	1.1	43	15	AAQ78841
	626	17.8	1.1	44	17	AAT33026
	627	17.8	1.1	44	20	AAX77430
	628	17.8	1.1	44	21	AAC96958
c	629	17.8	1.1	45	15	AAQ55102
c	630	17.8	1.1	45	15	AAQ69541
c	631	17.8	1.1	45	18	AAT64003
c	632	17.8	1.1	45	20	AAX17291
c	633	17.8	1.1	45	21	AAA28616
	634	17.8	1.1	45	22	AAC87939
	635	17.8	1.1	45	22	AAC87940
c	636	17.8	1.1	45	24	ABK82782
c	637	17.8	1.1	46	12	AAQ14251
c	638	17.8	1.1	46	12	AAQ14252
	639	17.8	1.1	46	14	AAQ49093
	640	17.8	1.1	46	20	AAX22935
c	641	17.8	1.1	46	22	AAF27354
c	642	17.8	1.1	47	18	AAT73790
c	643	17.8	1.1	47	21	AAZ68163
	644	17.8	1.1	47	22	AAD20555
c	645	17.8	1.1	48	12	AAQ12358
c	646	17.8	1.1	48	13	AAQ29924
	647	17.8	1.1	48	16	AAQ81434
	648	17.8	1.1	48	22	AAD13091
c	649	17.8	1.1	49	18	AAT73806
c	650	17.8	1.1	49	18	AAT73786
c	651	17.8	1.1	50	15	AAQ69787
c	652	17.8	1.1	50	18	AAT73801
c	653	17.8	1.1	50	18	AAT73804
c	654	17.8	1.1	50	18	AAT73781
c	655	17.8	1.1	50	18	AAT73774
c	656	17.8	1.1	50	18	AAT64249
c	657	17.8	1.1	50	20	AAX17537
	658	17.8	1.1	50	22	AAL29277
c	659	17.8	1.1	50	22	AAL29989
c	660	17.8	1.1	50	22	AAL30007
c	661	17.8	1.1	50	22	AAL32420
	662	17.8	1.1	50	22	AAL34214
c	663	17.8	1.1	50	22	AAL34375
c	664	17.8	1.1	50	22	AAL34441
c	665	17.8	1.1	50	22	AAL34573
	666	17.8	1.1	50	22	AAD20877

Human SNP oligonuc
Human SNP oligonuc
Human SNP oligonuc
Human silent SNP c
Human silent SNP c
DNA binding molecu
DNA binding molecu
Rat Shh coding seq
PCR primer for mou
Poliovirus vaccine
GC-rich DNA probe.
Oligonucleotide li
Human single nucle
Human single nucle
Human single nucle
Primer for 2',5'-o
Guamerin gene ampl
BHV-1 gD gene PCR
T. brucei trypanos
Permutein linker e
Human Inverted CCA
B cell lymphoma CJ
PCR primer used to
CJ linker library
Human Inverted CCA
Primer for adeno-a
Template Nuc T16 f
Maize polymorphic
Human transcriptio
Human phosphatase
Primer for lucifer
HCMV Ab heavy chai
Antibody H chain V
PCR primer VH2aF5.
PCR primer VH2aF5
DNA encoding signa
Human steroid 5-al
Human steroid 5-al
Test sequence from
Oligonucleotide MS
B43 scFv cassette
B43 scFv cassette
DNA binding molecu
Proinsulin-tendami
Proinsulin-tendami
P. multocida 16S r
DE19736591 primer
PCR primer, SEQ ID
Multiplex short-PC
Human map-related
Human CITEDX (HCIT
Europium-labelled
Fruit fly cuticle
HBV target sequenc
Oligo DEVA-1 for c
Multiplex short-PC
Multiplex short-PC
Herpes simplex vir
Multiplex short-PC
Multiplex short-PC
Multiplex short-PC
Multiplex short-PC
HSV-2 18K (start s
Test sequence from
Human SNP oligonuc
Human SNP oligonuc
Human SNP oligonuc
Human SNP oligonuc
Human SNP oligonuc
Human SNP oligonuc
Human SNP oligonuc
Human SNP oligonuc
Escherichia coli L

	667	17.8	1.1	50	22	AAI73843	Human silent SNP c
c	668	17.8	1.1	50	24	ABK83028	DNA binding molecu
c	669	17.8	1.1	50	24	AAS18936	Human CLASP-1 intr
	670	17.6	1.1	25	24	ABT03636	Human Hey-2 gene P
	671	17.6	1.1	27	18	AAT38815	Marmoset intracell
	672	17.6	1.1	28	21	AAZ43856	Human IgG4 heavy c
	673	17.6	1.1	28	22	AAH91324	Human inflammatory
	674	17.6	1.1	30	24	ABK27945	Lipolytic enzyme P
	675	17.6	1.1	31	18	AAT43522	Anti-lymphoma anti
c	676	17.6	1.1	31	20	AAX58868	Alfalfa aldose red
c	677	17.6	1.1	31	21	AAA79212	Human genomic DNA
	678	17.6	1.1	32	13	AAQ33551	Microsatellite seq
c	679	17.6	1.1	32	20	AAX76429	Sequencing reagent
c	680	17.6	1.1	32	21	AAA28513	Primer RIL 5' EcoR
	681	17.6	1.1	33	13	AAQ33565	Microsatellite seq
	682	17.6	1.1	34	16	AAQ78556	Gene-specific prim
	683	17.6	1.1	34	18	AAT80845	Gene specific prim
	684	17.6	1.1	35	20	AAV84061	Oligonucleotide of
c	685	17.6	1.1	36	14	AAQ52042	Breast cancer spec
c	686	17.6	1.1	36	18	AAT78495	RET proto-oncogene
c	687	17.6	1.1	36	22	AAS11861	Human collagen gen
	688	17.6	1.1	40	13	AAQ25025	Anti-sense oligonu
c	689	17.6	1.1	40	20	AAV83195	Primer for amplify
	690	17.6	1.1	40	21	AAZ95904	Polynucleotide seq
	691	17.6	1.1	40	21	AAZ96115	Polynucleotide seq
	692	17.6	1.1	41	15	AAQ69493	Human motilin gene
	693	17.6	1.1	41	18	AAT63955	Human motilin gene
c	694	17.6	1.1	41	19	AAV51140	Maize polymorphic
c	695	17.6	1.1	41	19	AAV51139	Maize polymorphic
	696	17.6	1.1	41	19	AAV47891	Maize polymorphic
	697	17.6	1.1	41	19	AAV44008	Human Mab #117/10C
c	698	17.6	1.1	41	20	AAZ23515	T cell receptor V
	699	17.6	1.1	41	20	AAX17243	Test sequence from
c	700	17.6	1.1	41	22	AAF84046	5' and 3' targetin
	701	17.6	1.1	41	24	ABK82734	DNA binding molecu
c	702	17.6	1.1	41	24	ABL40949	Slicing factor Prp
c	703	17.6	1.1	42	20	AAX23255	H. virescens JHE p
	704	17.6	1.1	42	21	AAA05763	Human growth hormo
c	705	17.6	1.1	42	21	AAA05767	Human growth hormo
	706	17.6	1.1	42	22	AAF67667	Xenopus insulator
	707	17.6	1.1	42	24	ABA93611	Human tau protein
	708	17.6	1.1	43	20	AAX78900	Non-replicative Va
c	709	17.6	1.1	43	22	AAC82204	Human retrovirus D
	710	17.6	1.1	44	14	AAQ50454	PCR Primer for amp
	711	17.6	1.1	44	14	AAQ50456	PCR primer for amp
c	712	17.6	1.1	44	15	AAQ64210	Degenerate probe f
	713	17.6	1.1	44	15	AAQ69313	Human sodium/potas
	714	17.6	1.1	44	18	AAT63775	Human Na/K ATPase
c	715	17.6	1.1	44	19	AAV43251	3' AAV-ITR primer
	716	17.6	1.1	44	20	AAX59211	Human antibody VH
	717	17.6	1.1	44	20	AAX17063	Test sequence from
	718	17.6	1.1	44	24	ABK82554	DNA binding molecu
	719	17.6	1.1	45	17	AAT42480	Primer for chimeri
c	720	17.6	1.1	45	20	AAX00855	Phage display libr
c	721	17.6	1.1	45	21	AAZ87269	DNA encoding FGFR-
	722	17.6	1.1	45	21	AAZ43463	Human scFV light a
c	723	17.6	1.1	45	21	AAZ43464	Human scFV light a
	724	17.6	1.1	45	21	AAZ43521	Human scFV light a
	725	17.6	1.1	45	24	ABN83130	Moloney leukaemia
	726	17.6	1.1	46	15	AAQ62448	Vector pVAC1 const
c	727	17.6	1.1	46	16	AAT02971	Gene delivery fusi
	728	17.6	1.1	46	17	AAT09697	C. elegans glutama
c	729	17.6	1.1	46	22	AAI74098	Human silent SNP c
c	730	17.6	1.1	47	18	AAT88017	Human interleukin
c	731	17.6	1.1	47	19	AAV45793	Vector pROCOS4/7 i
	732	17.6	1.1	47	20	AAZ01112	Probe for human PG
c	733	17.6	1.1	47	21	AAZ68369	Human map-related
	734	17.6	1.1	47	21	AAZ68664	Human map-related
c	735	17.6	1.1	47	23	AAH88358	CNS disorder-relat
	736	17.6	1.1	47	24	ABK86107	Human IGFBP3 site
	737	17.6	1.1	48	18	AAT64734	Phytase gene probe
	738	17.6	1.1	48	20	AAX00874	Nucleotide sequenc
	739	17.6	1.1	48	22	AAF28078	Nascent protein de
	740	17.6	1.1	48	24	ABK86064	Protein C mutant K
c	741	17.6	1.1	48	24	ABK86065	Protein C mutant K
c	742	17.6	1.1	49	18	AAT80517	Hepatoma AS-30D Ty
	743	17.6	1.1	49	18	AAT63974	Human amyloid A4 p
	744	17.6	1.1	49	20	AAX17262	Test sequence from
	745	17.6	1.1	49	23	ABA09759	Adaptor oligonucle
	746	17.6	1.1	49	23	ABA09868	Primer #49 from pr
	747	17.6	1.1	49	23	ABA10979	Tail adaptor oligo
	748	17.6	1.1	49	24	ABK82753	DNA binding molecu
c	749	17.6	1.1	50	12	AAQ15286	BMP-3 5' end probe
	750	17.6	1.1	50	15	AAQ69774	Herpes simplex vir
c	751	17.6	1.1	50	15	AAQ69841	Simian virus 40 T/
	752	17.6	1.1	50	18	AAT48644	Synthetic haipin o
	753	17.6	1.1	50	18	AAT61249	Human antibody kap
	754	17.6	1.1	50	18	AAT64236	HSV-1 b'g'a'TIF/VS
c	755	17.6	1.1	50	18	AAT64303	SV40 T/t early P2
	756	17.6	1.1	50	19	AAV49704	Human J chain targ
c	757	17.6	1.1	50	19	AAV10620	Primer for eryAI g
	758	17.6	1.1	50	20	AAX08857	Nucleotide used to
c	759	17.6	1.1	50	20	AAX17591	Test sequence from
	760	17.6	1.1	50	20	AAX17524	Test sequence from
c	761	17.6	1.1	50	21	AAA29070	3' PCR primer for
	762	17.6	1.1	50	21	AAZ99814	Nucleotide sequenc
c	763	17.6	1.1	50	22	AAL27949	Human SNP oligonuc
c	764	17.6	1.1	50	22	AAL28617	Human SNP oligonuc
	765	17.6	1.1	50	22	AAL28815	Human SNP oligonuc
c	766	17.6	1.1	50	22	AAL29050	Human SNP oligonuc
	767	17.6	1.1	50	22	AAL29363	Human SNP oligonuc
c	768	17.6	1.1	50	22	AAL30328	Human SNP oligonuc
c	769	17.6	1.1	50	22	AAL30920	Human SNP oligonuc
	770	17.6	1.1	50	22	AAL31600	Human SNP oligonuc
c	771	17.6	1.1	50	22	AAL32086	Human SNP oligonuc
	772	17.6	1.1	50	22	AAL33552	Human SNP oligonuc
	773	17.6	1.1	50	22	AAL33634	Human SNP oligonuc
c	774	17.6	1.1	50	22	AAL34014	Human SNP oligonuc
c	775	17.6	1.1	50	22	AAL34151	Human SNP oligonuc
	776	17.6	1.1	50	22	AAL34194	Human SNP oligonuc
c	777	17.6	1.1	50	22	AAL34195	Human SNP oligonuc
c	778	17.6	1.1	50	22	AAL34298	Human SNP oligonuc
	779	17.6	1.1	50	22	AAL34313	Human SNP oligonuc
c	780	17.6	1.1	50	22	AAL34327	Human SNP oligonuc
	781	17.6	1.1	50	22	AAL34411	Human SNP oligonuc
c	782	17.6	1.1	50	22	AAS43512	Corneodesmosin sin
	783	17.6	1.1	50	22	AAI75801	Human silent SNP c
c	784	17.6	1.1	50	22	AAH89754	Human coding sequ
	785	17.6	1.1	50	22	AAF30231	Oligonucleotide fo
	786	17.6	1.1	50	24	ABK97280	TM gene oligonucle
	787	17.6	1.1	50	24	ABK83015	DNA binding molecu
c	788	17.6	1.1	50	24	ABK83082	DNA binding molecu
	789	17.6	1.1	50	24	ABK47030	Adenovirus vectro
	790	17.4	1.1	26	20	AAZ23703	Human sonic hedgeh
	791	17.4	1.1	26	20	AAZ28439	Primer 344, for am
	792	17.4	1.1	26	24	ABK28815	HSV-2 capture sequ
c	793	17.4	1.1	27	14	AAQ40855	DNA sequence used
	794	17.4	1.1	27	14	AAQ40856	DNA sequence used
	795	17.4	1.1	30	18	AAT89034	Solid phase gene H
c	796	17.4	1.1	31	22	AAI29725	Human single nucle
c	797	17.4	1.1	31	22	AAI29731	Human single nucle
	798	17.4	1.1	31	22	AAI30723	Human single nucle
c	799	17.4	1.1	32	20	AAX21303	Human PKD protein
	800	17.4	1.1	34	18	AAT76246	Human IL6 receptor
	801	17.4	1.1	34	20	AAX54036	Human IL-6 recepto
	802	17.4	1.1	34	21	AAF19602	Human IL6 receptor
	803	17.4	1.1	34	21	AAA33479	Low adenosine anti
	804	17.4	1.1	34	21	AAA33480	Low adenosine anti
	805	17.4	1.1	34	22	AAH45806	Human RNA helicase
	806	17.4	1.1	35	22	AAI67126	B. licheniformis a
	807	17.4	1.1	35	22	AAH42693	PCR primer used to
	808	17.4	1.1	35	22	AAF62585	Oligonucleotide 17
	809	17.4	1.1	36	16	AAT57645	RSV N hammerhead r
c	810	17.4	1.1	36	19	AAV37232	Primer for bovine
c	811	17.4	1.1	36	20	AAX55009	C/EBP-beta antisen
c	812	17.4	1.1	36	21	AAF20578	Human C/EBP polynu

c	813	17.4	1.1	36	21	AAA34456
c	814	17.4	1.1	37	20	AAX55008
c	815	17.4	1.1	37	21	AAF20577
c	816	17.4	1.1	37	21	AAA34455
c	817	17.4	1.1	37	24	AAS19086
	818	17.4	1.1	38	17	AAT15807
	819	17.4	1.1	38	18	AAT88132
c	820	17.4	1.1	38	20	AAX55007
c	821	17.4	1.1	38	21	AAF20576
c	822	17.4	1.1	38	21	AAA34454
	823	17.4	1.1	38	24	ABL31969
	824	17.4	1.1	38	24	ABL31971
c	825	17.4	1.1	39	20	AAX55006
c	826	17.4	1.1	39	21	AAF20575
c	827	17.4	1.1	39	21	AAA34453
c	828	17.4	1.1	39	21	AAZ60139
c	829	17.4	1.1	39	24	ABL91539
c	830	17.4	1.1	40	20	AAX55005
c	831	17.4	1.1	40	21	AAF20574
c	832	17.4	1.1	40	21	AAA09439
c	833	17.4	1.1	40	21	AAA34452
c	834	17.4	1.1	41	20	AAX55004
	835	17.4	1.1	41	20	AAX22756
c	836	17.4	1.1	41	21	AAF20573
c	837	17.4	1.1	41	21	AAA34451
c	838	17.4	1.1	41	24	ABL53417
	839	17.4	1.1	42	20	AAX57794
c	840	17.4	1.1	42	20	AAX55003
c	841	17.4	1.1	42	21	AAF20572
c	842	17.4	1.1	42	21	AAA34450
	843	17.4	1.1	42	22	AAC86365
	844	17.4	1.1	43	9	AAN82099
	845	17.4	1.1	43	10	AAN94347
c	846	17.4	1.1	43	20	AAX55002
c	847	17.4	1.1	43	21	AAF20571
c	848	17.4	1.1	43	21	AAA34449
	849	17.4	1.1	44	15	AAQ69402
	850	17.4	1.1	44	18	AAT63864
	851	17.4	1.1	44	20	AAX59209
c	852	17.4	1.1	44	20	AAX55001
	853	17.4	1.1	44	20	AAX17152
c	854	17.4	1.1	44	21	AAF20570
c	855	17.4	1.1	44	21	AAA34448
c	856	17.4	1.1	44	22	AAH19349
	857	17.4	1.1	44	24	ABK82643
	858	17.4	1.1	45	12	AAQ12281
	859	17.4	1.1	45	12	AAQ12282
c	860	17.4	1.1	45	15	AAQ69449
c	861	17.4	1.1	45	16	AAQ80726
c	862	17.4	1.1	45	18	AAT63911
c	863	17.4	1.1	45	19	AAV18215
c	864	17.4	1.1	45	20	AAX55000
c	865	17.4	1.1	45	20	AAX54966
c	866	17.4	1.1	45	20	AAX17199
c	867	17.4	1.1	45	21	AAF20535
c	868	17.4	1.1	45	21	AAF20569
c	869	17.4	1.1	45	21	AAA34413
c	870	17.4	1.1	45	21	AAA34447
c	871	17.4	1.1	45	21	AAA05786
c	872	17.4	1.1	45	24	ABK82690
c	873	17.4	1.1	45	24	AAD35831
	874	17.4	1.1	46	16	AAT08345
c	875	17.4	1.1	46	20	AAX54965
c	876	17.4	1.1	46	21	AAF20534
c	877	17.4	1.1	46	21	AAA34412
c	878	17.4	1.1	46	22	AAF27030
	879	17.4	1.1	47	15	AAQ69263
	880	17.4	1.1	47	18	AAT63725
	881	17.4	1.1	47	20	AAX56657
	882	17.4	1.1	47	20	AAX56659
	883	17.4	1.1	47	20	AAX17013
	884	17.4	1.1	47	21	AAZ65789
	885	17.4	1.1	47	21	AAZ67439

Human adenosine re
C/EBP-beta antisen
Human C/EBP polynu
Human adenosine re
Human chorionic go
Humanised LL2 MAb
Primer for variabl
C/EBP-beta antisen
Human C/EBP polynu
Human adenosine re
FokI/FspI containi
FokI/FspI containi
C/EBP-beta antisen
Human C/EBP polynu
Human adenosine re
PCR primer C2 used
Chlamydia pneumoni
C/EBP-beta antisen
Human C/EBP polynu
M. alpina delta-6
Human adenosine re
C/EBP-beta antisen
Human ESRP1 DNA PC
Human C/EBP polynu
Human adenosine re
tRNA guanine glyco
Reverse primer for
C/EBP-beta antisen
Human C/EBP polynu
Human adenosine re
Linker used to mak
Oligonucleotide pr
Probe for 2,5-dike
C/EBP-beta antisen
Human C/EBP polynu
Human adenosine re
Human GST pi gene
Human GST pi gene
Human antibody VH
C/EBP-beta antisen
Test sequence from
Human C/EBP polynu
Human adenosine re
Human platelet-der
DNA binding molecu
Probe to minisatel
Probe to minisatel
Human insulin-like
Bombyx mori sex sp
Human IGF binding
Codon optimised si
C/EBP-beta antisen
C/EBP-beta antisen
Test sequence from
Human C/EBP polynu
Human C/EBP polynu
Human adenosine re
Human adenosine re
Streptavidin displ
DNA binding molecu
Rat galanin recept
The Nf-kB ELAM 2 b
C/EBP-beta antisen
Human C/EBP polynu
Human adenosine re
Human Desert hedge
Human beta-actin g
Human beta-actin g
Primer 30. Synthe
Primer 32. Synthe
Test sequence from
Human map-related
Human map-related

c	886	17.4	1.1	47	21	AAZ68973
	887	17.4	1.1	47	22	AAF30323
	888	17.4	1.1	47	24	ABK82504
	889	17.4	1.1	47	24	ABA99916
	890	17.4	1.1	48	16	AAT02970
	891	17.4	1.1	48	22	AAD06901
	892	17.4	1.1	48	22	AAI64404
c	893	17.4	1.1	49	22	AAS13008
	894	17.4	1.1	50	12	AAQ15286
	895	17.4	1.1	50	17	AAX35091
	896	17.4	1.1	50	17	AAT41693
	897	17.4	1.1	50	17	AAT37108
	898	17.4	1.1	50	21	AAA77273
	899	17.4	1.1	50	21	AAC11348
	900	17.4	1.1	50	21	AAC11563
	901	17.4	1.1	50	22	AAL28563
	902	17.4	1.1	50	22	AAL28816
	903	17.4	1.1	50	22	AAL29078
c	904	17.4	1.1	50	22	AAL29236
c	905	17.4	1.1	50	22	AAL29415
	906	17.4	1.1	50	22	AAL29449
	907	17.4	1.1	50	22	AAL29799
	908	17.4	1.1	50	22	AAL29803
	909	17.4	1.1	50	22	AAL30007
	910	17.4	1.1	50	22	AAL31229
c	911	17.4	1.1	50	22	AAL31322
	912	17.4	1.1	50	22	AAL34058
	913	17.4	1.1	50	22	AAL34106
	914	17.4	1.1	50	22	AAL34299
c	915	17.4	1.1	50	22	AAL34331
c	916	17.4	1.1	50	22	AAL34547
c	917	17.4	1.1	50	22	AAL34585
	918	17.4	1.1	50	22	AAI73276
	919	17.4	1.1	50	22	AAI76535
	920	17.4	1.1	50	22	AAI76857
	921	17.4	1.1	50	22	AAI76859
c	922	17.4	1.1	50	22	AAI77727
	923	17.4	1.1	50	22	AAI78355
c	924	17.4	1.1	50	22	AAH89775
c	925	17.4	1.1	50	22	AAH90532
c	926	17.4	1.1	50	22	AAD11597
	927	17.4	1.1	50	23	AAS15626
	928	17.4	1.1	50	23	AAS15627
	929	17.4	1.1	50	24	ABQ75849
c	930	17.2	1.1	24	20	AAX01774
	931	17.2	1.1	24	21	AAA64229
c	932	17.2	1.1	24	22	AAF74610
c	933	17.2	1.1	25	20	AAX55142
c	934	17.2	1.1	25	21	AAF20711
c	935	17.2	1.1	25	21	AAA34589
c	936	17.2	1.1	26	9	AAN82048
	937	17.2	1.1	30	13	AAQ20870
c	938	17.2	1.1	30	13	AAQ20873
	939	17.2	1.1	30	13	AAQ24607
c	940	17.2	1.1	30	20	AAZ08169
c	941	17.2	1.1	30	21	AAA05778
	942	17.2	1.1	30	21	AAZ39175
	943	17.2	1.1	30	22	AAF99891
c	944	17.2	1.1	30	22	AAF99891
c	945	17.2	1.1	30	23	AAS13774
	946	17.2	1.1	30	23	AAS13789
c	947	17.2	1.1	30	23	AAS13789
	948	17.2	1.1	30	24	AAL42352
	949	17.2	1.1	31	13	AAQ33543
	950	17.2	1.1	31	22	AAI30043
c	951	17.2	1.1	31	22	AAI31038
c	952	17.2	1.1	32	18	AAT76227
c	953	17.2	1.1	32	20	AAX54023
c	954	17.2	1.1	32	21	AAF19589
c	955	17.2	1.1	32	21	AAA33467
c	956	17.2	1.1	32	21	AAZ48716
	957	17.2	1.1	33	13	AAQ29687
	958	17.2	1.1	33	21	AAZ43426

Human map-related
Human gamma 1 cons
DNA binding molecu
Chicken tenascin t
Gene delivery fusi
Human oligo 8 to c
PCR primer #11. U
HIV-1 zinc binding
BMP-3 5' end probe
Oligonucleotide wh
Oligonucleotide co
Oligonucleotide ha
Human clone cg4398
Human secreted pro
Human secreted pro
Human SNP oligonuc
Human SNP oligonuc
Human SNP oligonuc
Human SNP oligonuc
Human SNP oligonuc
Human SNP oligonuc
Human SNP oligonuc
Human SNP oligonuc
Human SNP oligonuc
Human SNP oligonuc
Human SNP oligonuc
Human SNP oligonuc
Human SNP oligonuc
Human SNP oligonuc
Human SNP oligonuc
Human silent SNP c
Human silent SNP c
Human silent SNP c
Human silent SNP c
Human silent SNP c
Human silent SNP c
Human coding sequ
Human clone cg4397
Non-target oligo N
Human beta 2 micro
Human HLA-A2 PCR p
PCR primer for amp
Human cystic fibro
RACE PCR primer JA
Cystic fibrosis tr
C/EBP-beta antisen
Human C/EBP polynu
Human adenosine re
Probe O-CCR-26 for
Immunostimulatory
Immunostimulatory
Primer BDG-122. S
HTRT sequence-spec
Streptavidin displ
Human BMP-4 5' ups
Immunostimulatory
Immunostimulatory
Simple sequence re
Simple sequence re
Simple sequence re
Novel sand pear mi
Microsatellite seq
Human single nucle
Human single nucle
Human IL5 antisens
Human IL-5 antisen
Human IL5 polynucl
Low adenosine anti
PCR primer EGRP6 f
Oligonucleotide pr
Hybrid ScFV-3-19 P

c 959	17.2	1.1	35	19	AAT99119	Synthetic PCR prim
960	17.2	1.1	35	21	AAZ58685	Anti-CD4 antibody
961	17.2	1.1	35	21	AAZ44227	Murine CD4/CD34 re
962	17.2	1.1	36	20	AAV72065	806.077 scFv antib
963	17.2	1.1	36	21	AAA35919	Permutein linker e
964	17.2	1.1	37	17	AAT38703	Primer for DNA enc
965	17.2	1.1	37	21	AAZ28955	PCR primer mu-ATG2
966	17.2	1.1	38	12	AAQ14197	Probe P1446 for Gi
c 967	17.2	1.1	38	12	AAQ14795	fdTetBSN vector ol
c 968	17.2	1.1	38	20	AAX59828	Probe used to dete
969	17.2	1.1	38	20	AAX59829	Probe used to dete
970	17.2	1.1	39	14	AAQ51915	c-myc mRNA ribozym
c 971	17.2	1.1	39	22	AAD18455	T. vulgaris (Tvu)
c 972	17.2	1.1	39	22	AAH47403	Mutant Tvu DNA pol
c 973	17.2	1.1	40	12	AAQ11990	Probe Sq918 to ena
c 974	17.2	1.1	40	13	AAQ25018	Sense oligonucleot
c 975	17.2	1.1	40	18	AAT47465	Foldback triplex f
c 976	17.2	1.1	40	18	AAT47475	Foldback triplex f
977	17.2	1.1	40	19	AAV47799	Maize polymorphic
978	17.2	1.1	40	21	AAA12119	T. brucei trypanos
c 979	17.2	1.1	40	21	AAZ95915	Polynucleotide seq
980	17.2	1.1	40	21	AAZ95991	Polynucleotide seq
981	17.2	1.1	40	21	AAZ57137	Quadruplex DNA SEQ
982	17.2	1.1	41	15	AAQ58775	Human glucagon rec
983	17.2	1.1	41	15	AAQ62422	Vector pVAC1 const
984	17.2	1.1	41	15	AAQ62424	Vector pVAC1 const
985	17.2	1.1	41	15	AAQ62442	Vector pVAC1 const
c 986	17.2	1.1	41	19	AAV50937	Maize polymorphic
987	17.2	1.1	41	19	AAV50609	Brassica sp. polym
c 988	17.2	1.1	41	19	AAV47888	Maize polymorphic
989	17.2	1.1	41	24	ABL41573	Probe #1 relating
c 990	17.2	1.1	41	24	ABA99840	Human TGF-beta 110
c 991	17.2	1.1	41	24	AAS16440	Human hydrogenase
c 992	17.2	1.1	42	16	AAQ86675	NF-AT transcriptio
c 993	17.2	1.1	42	17	AAT27160	Human Machado-Jose
994	17.2	1.1	42	17	AAT14495	HuMN14 Fab/F(ab')2
995	17.2	1.1	42	18	AAT94056	Oligo used in cons
996	17.2	1.1	42	18	AAT80027	Primer #3 for tumo
c 997	17.2	1.1	42	20	AAZ24679	Oligonucleotide fo
998	17.2	1.1	42	20	AAX36430	PCR primer for Hum
c 999	17.2	1.1	42	21	AAA29261	Human nuclear fact
c1000	17.2	1.1	42	22	AAH73847	Thermal amplificat

ALIGNMENTS

RESULT 1
AAD09047/c
ID AAD09047 standard; DNA; 50 BP.
XX
AC AAD09047;
XX
DT 04-SEP-2001 (first entry)
XX
DE Human oligonucleotide HOG-403 used to construct pKS285.
XX
KW Human; hedgehog protein; nootropic; neuroprotective; anticonvulsant;
KW cytostatic; therapy; Alzheimer's disease; Parkinson's disease; injury;
KW Huntington's chorea; amylotropic lateral sclerosis; multiple sclerosis;
KW nervous system aging; neurodegenerative disease; immunological disease;
KW malignant glioma; medulloblastoma; neuroectodermal tumour; cancer;
KW extracellular signalling protein; HOG-403; ss.
XX
OS Homo sapiens.
XX
PN WO200134654-A1.
XX
PD 17-MAY-2001.
XX
PF 02-NOV-2000; 2000WO-US30405.
XX
PR 05-NOV-1999; 99US-0164025.
XX
PA (BIOJ) BIOGEN INC.
XX
PI Strauch K;
XX
DR WPI; 2001-329075/34.
XX
PT Novel isolated hedgehog fusion polypeptide useful for treating
PT neurological conditions such as Alzheimer's disease, Parkinson's
PT disease, Huntington's chorea, amylotropic lateral sclerosis, and
PT multiple sclerosis -
XX
PS Example 1; Page 60; 178pp; English.
XX
CC The present invention relates to hedgehog fusion proteins. Hedgehog
CC proteins are a family of extracellular signalling proteins that regulate
CC various aspects of embryonic development both in vertebrates and in
CC invertebrates. Hedgehog fusion protein is useful for the prophylaxis or
CC treatment of any condition or disease state for which a hedgehog or
CC patched protein constituent is efficacious and in the diagnosis of
CC constituents or conditions of disease states in biological system or
CC specimens and for diagnostic purposes in non-physiological systems.
CC Hedgehog fusion protein is useful for treating neurological conditions
CC due to injury, aging of nervous system, including Alzheimer's disease,
CC chronic neurodegenerative diseases of the nervous system, including
CC Parkinson's disease, Huntington's chorea, amylotropic lateral sclerosis
CC and chronic immunological diseases of nervous system including multiple
CC sclerosis and malignant gliomas, medulloblastomas, neuroectodermal
CC tumours and to specifically target medical therapies against cancers and
CC tumours which express the receptor for the protein. The present sequence
CC is human oligonucleotide HOG-403 used to construct pKS285, pKS288,
CC pKS309, pKS310, pKS287 pKS300 and pKS289 plasmids which are used in the
CC invention.
XX
SQ Sequence 50 BP; 11 A; 11 C; 15 G; 13 T; 0 other;

Query Match 3.2%; Score 50; DB 22; Length 50;
Best Local Similarity 100.0%; Pred. No. 7.3;
Matches 50; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 272 CCTTTAGCCTACAAGCAGTTTATCCCCAATGTGGCCGAGAAGACCCTAGG 321
||||||||||||||||||||||||||||||||||||||||||||||||||
Db 50 CCTTTAGCCTACAAGCAGTTTATCCCCAATGTGGCCGAGAAGACCCTAGG 1

RESULT 2
AAD09078/c
ID AAD09078 standard; DNA; 50 BP.
XX
AC AAD09078;
XX
DT 04-SEP-2001 (first entry)
XX
DE Human oligonucleotide HOG-803 used to construct pMMC22.
XX
KW Human; hedgehog protein; nootropic; neuroprotective; anticonvulsant;
KW cytostatic; therapy; Alzheimer's disease; Parkinson's disease; injury;
KW Huntington's chorea; amylotropic lateral sclerosis; multiple sclerosis;
KW nervous system aging; neurodegenerative disease; immunological disease;
KW malignant glioma; medulloblastoma; neuroectodermal tumour; cancer;
KW extracellular signalling protein; HOG-803; ss.
XX
OS Homo sapiens.
XX
PN WO200134654-A1.
XX
PD 17-MAY-2001.
XX
PF 02-NOV-2000; 2000WO-US30405.
XX
PR 05-NOV-1999; 99US-0164025.
XX
PA (BIOJ) BIOGEN INC.

XX
PI Strauch K;
XX
DR WPI; 2001-329075/34.
XX
PT Novel isolated hedgehog fusion polypeptide useful for treating
PT neurological conditions such as Alzheimer's disease, Parkinson's
PT disease, Huntington's chorea, amylotropic lateral sclerosis, and
PT multiple sclerosis -
XX
PS Example 1; Page 62; 178pp; English.
XX
CC The present invention relates to hedgehog fusion proteins. Hedgehog
CC proteins are a family of extracellular signalling proteins that regulate
CC various aspects of embryonic development both in vertebrates and in
CC invertebrates. Hedgehog fusion protein is useful for the prophylaxis or
CC treatment of any condition or disease state for which a hedgehog or
CC patched protein constituent is efficacious and in the diagnosis of
CC constituents or conditions of disease states in biological system or
CC specimens and for diagnostic purposes in non-physiological systems.
CC Hedgehog fusion protein is useful for treating neurological conditions
CC due to injury, aging of nervous system, including Alzheimer's disease,
CC chronic neurodegenerative diseases of the nervous system, including
CC Parkinson's disease, Huntington's chorea, amylotropic lateral sclerosis
CC and chronic immunological diseases of nervous system including multiple
CC sclerosis and malignant gliomas, medulloblastomas, neuroectodermal
CC tumours and to specifically target medical therapies against cancers and
CC tumours which express the receptor for the protein. The present sequence
CC is human oligonucleotide HOG-803 used to construct pMMC22 plasmid which
CC is used in the invention.
XX
SQ Sequence 50 BP; 6 A; 17 C; 13 G; 14 T; 0 other;

Query Match 3.1%; Score 48.4; DB 22; Length 50;
Best Local Similarity 98.0%; Pred. No. 14;
Matches 49; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 228 CGGGCAGGGGGTTCGGGAAGAGGAGGCACCCCAAAAAGCTGACCCCTTTA 277
||||||||||||||||||||| ||||||||||||||||||||||||||
Db 50 CGGGCAGGGGGTTCGGGAAGAAGAGGCACCCCAAAAAGCTGACCCCTTTA 1

RESULT 3
AAD09079/c
ID AAD09079 standard; DNA; 50 BP.
XX
AC AAD09079;
XX
DT 04-SEP-2001 (first entry)
XX
DE Human oligonucleotide HOG-804 used to construct pMMC23.
XX
KW Human; hedgehog protein; nootropic; neuroprotective; anticonvulsant;
KW cytostatic; therapy; Alzheimer's disease; Parkinson's disease; injury;
KW Huntington's chorea; amylotropic lateral sclerosis; multiple sclerosis;
KW nervous system aging; neurodegenerative disease; immunological disease;
KW malignant glioma; medulloblastoma; neuroectodermal tumour; cancer;
KW extracellular signalling protein; HOG-804; ss.
XX
OS Homo sapiens.
XX
PN WO200134654-A1.
XX
PD 17-MAY-2001.
XX
PF 02-NOV-2000; 2000WO-US30405.
XX
PR 05-NOV-1999; 99US-0164025.
XX
PA (BIOJ) BIOGEN INC.
XX
PI Strauch K;
XX
DR WPI; 2001-329075/34.
XX
PT Novel isolated hedgehog fusion polypeptide useful for treating
PT neurological conditions such as Alzheimer's disease, Parkinson's
PT disease, Huntington's chorea, amylotropic lateral sclerosis, and
PT multiple sclerosis -
XX
PS Example 1; Page 62; 178pp; English.
XX
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CC proteins are a family of extracellular signalling proteins that regulate
CC various aspects of embryonic development both in vertebrates and in
CC invertebrates. Hedgehog fusion protein is useful for the prophylaxis or
CC treatment of any condition or disease state for which a hedgehog or
CC patched protein constituent is efficacious and in the diagnosis of
CC constituents or conditions of disease states in biological system or
CC specimens and for diagnostic purposes in non-physiological systems.
CC Hedgehog fusion protein is useful for treating neurological conditions
CC due to injury, aging of nervous system, including Alzheimer's disease,
CC chronic neurodegenerative diseases of the nervous system, including
CC Parkinson's disease, Huntington's chorea, amylotropic lateral sclerosis
CC and chronic immunological diseases of nervous system including multiple
CC sclerosis and malignant gliomas, medulloblastomas, neuroectodermal
CC tumours and to specifically target medical therapies against cancers and
CC tumours which express the receptor for the protein. The present sequence
CC is human oligonucleotide HOG-804 used to construct pMMC23 plasmid which
CC is used in the invention.
XX
SQ Sequence 50 BP; 6 A; 19 C; 13 G; 12 T; 0 other;

Query Match 3.1%; Score 48.4; DB 22; Length 50;
Best Local Similarity 98.0%; Pred. No. 14;
Matches 49; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 228 CGGGCAGGGGGTTCGGGAAGAGGAGGCACCCCAAAAAGCTGACCCCTTTA 277
||||||||||||||||||| ||||||||||||||||||||||||||||
Db 50 CGGGCAGGGGGTTCGGGAGGAGGAGGCACCCCAAAAAGCTGACCCCTTTA 1

RESULT 4
AAD09081/c
ID AAD09081 standard; DNA; 50 BP.
XX
AC AAD09081;
XX
DT 04-SEP-2001 (first entry)
XX
DE Human oligonucleotide HOG-807 used to construct pMMC26.
XX
KW Human; hedgehog protein; nootropic; neuroprotective; anticonvulsant;
KW cytostatic; therapy; Alzheimer's disease; Parkinson's disease; injury;
KW Huntington's chorea; amylotropic lateral sclerosis; multiple sclerosis;
KW nervous system aging; neurodegenerative disease; immunological disease;
KW malignant glioma; medulloblastoma; neuroectodermal tumour; cancer;
KW extracellular signalling protein; HOG-807; ss.
XX
OS Homo sapiens.
XX
PN WO200134654-A1.
XX
PD 17-MAY-2001.
XX
PF 02-NOV-2000; 2000WO-US30405.
XX
PR 05-NOV-1999; 99US-0164025.
XX
PA (BIOJ) BIOGEN INC.
XX
PI Strauch K;
XX
DR WPI; 2001-329075/34.
XX
PT Novel isolated hedgehog fusion polypeptide useful for treating

PT neurological conditions such as Alzheimer's disease, Parkinson's
PT disease, Huntington's chorea, amylotropic lateral sclerosis, and
PT multiple sclerosis -
XX
PS Example 1; Page 62; 178pp; English.
XX
CC The present invention relates to hedgehog fusion proteins. Hedgehog
CC proteins are a family of extracellular signalling proteins that regulate
CC various aspects of embryonic development both in vertebrates and in
CC invertebrates. Hedgehog fusion protein is useful for the prophylaxis or
CC treatment of any condition or disease state for which a hedgehog or
CC patched protein constituent is efficacious and in the diagnosis of
CC constituents or conditions of disease states in biological system or
CC specimens and for diagnostic purposes in non-physiological systems.
CC Hedgehog fusion protein is useful for treating neurological conditions
CC due to injury, aging of nervous system, including Alzheimer's disease,
CC chronic neurodegenerative diseases of the nervous system, including
CC Parkinson's disease, Huntington's chorea, amylotropic lateral sclerosis
CC and chronic immunological diseases of nervous system including multiple
CC sclerosis and malignant gliomas, medulloblastomas, neuroectodermal
CC tumours and to specifically target medical therapies against cancers and
CC tumours which express the receptor for the protein. The present sequence
CC is human oligonucleotide HOG-807 used to construct pMMC26 plasmid which
CC is used in the invention.
XX
SQ Sequence 50 BP; 6 A; 19 C; 15 G; 10 T; 0 other;

Query Match 2.9%; Score 45.2; DB 22; Length 50;
Best Local Similarity 94.0%; Pred. No. 47;
Matches 47; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 228 CGGGCAGGGGGTTCGGGAAGAGGAGGCACCCCAAAAAGCTGACCCCTTTA 277
||||||||||||||||||||||||||||||| | ||||||||||||||
Db 50 CGGGCAGGGGGTTCGGGAAGAGGAGGCACCCCCAGCAGCTGACCCCTTTA 1

RESULT 5
AAD09073
ID AAD09073 standard; DNA; 47 BP.
XX
AC AAD09073;
XX
DT 04-SEP-2001 (first entry)
XX
DE Human oligonucleotide HOG-789 used to construct pMMC22.
XX
KW Human; hedgehog protein; nootropic; neuroprotective; anticonvulsant;
KW cytostatic; therapy; Alzheimer's disease; Parkinson's disease; injury;
KW Huntington's chorea; amylotropic lateral sclerosis; multiple sclerosis;
KW nervous system aging; neurodegenerative disease; immunological disease;
KW malignant glioma; medulloblastoma; neuroectodermal tumour; cancer;
KW extracellular signalling protein; HOG-789; ss.
XX
OS Homo sapiens.
XX
PN WO200134654-A1.
XX
PD 17-MAY-2001.
XX
PF 02-NOV-2000; 2000WO-US30405.
XX
PR 05-NOV-1999; 99US-0164025.
XX
PA (BIOJ) BIOGEN INC.
XX
PI Strauch K;
XX
DR WPI; 2001-329075/34.
XX
PT Novel isolated hedgehog fusion polypeptide useful for treating
PT neurological conditions such as Alzheimer's disease, Parkinson's
PT disease, Huntington's chorea, amylotropic lateral sclerosis, and
PT multiple sclerosis -
XX
PS Example 1; Page 61; 178pp; English.
XX
CC The present invention relates to hedgehog fusion proteins. Hedgehog
CC proteins are a family of extracellular signalling proteins that regulate
CC various aspects of embryonic development both in vertebrates and in
CC invertebrates. Hedgehog fusion protein is useful for the prophylaxis or
CC treatment of any condition or disease state for which a hedgehog or
CC patched protein constituent is efficacious and in the diagnosis of
CC constituents or conditions of disease states in biological system or
CC specimens and for diagnostic purposes in non-physiological systems.
CC Hedgehog fusion protein is useful for treating neurological conditions
CC due to injury, aging of nervous system, including Alzheimer's disease,
CC chronic neurodegenerative diseases of the nervous system, including
CC Parkinson's disease, Huntington's chorea, amylotropic lateral sclerosis
CC and chronic immunological diseases of nervous system including multiple
CC sclerosis and malignant gliomas, medulloblastomas, neuroectodermal
CC tumours and to specifically target medical therapies against cancers and
CC tumours which express the receptor for the protein. The present sequence
CC is human oligonucleotide HOG-789 used to construct pMMC22 plasmid which
CC is used in the invention.
XX
SQ Sequence 47 BP; 13 A; 13 C; 18 G; 3 T; 0 other;

Query Match 2.8%; Score 43.8; DB 22; Length 47;
Best Local Similarity 95.7%; Pred. No. 81;
Matches 45; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 225 GACCGGGCAGGGGGTTCGGGAAGAGGAGGCACCCCAAAAAGCTGACC 271
| |||||||||||||||||||||||| ||||||||||||||||||||||
Db 1 GCCCGGGCAGGGGGTTCGGGAAGAAGAGGCACCCCAAAAAGCTGACC 47

RESULT 6
AAD09074
ID AAD09074 standard; DNA; 47 BP.
XX
AC AAD09074;
XX
DT 04-SEP-2001 (first entry)
XX
DE Human oligonucleotide HOG-791 used to construct pMMC23.
XX
KW Human; hedgehog protein; nootropic; neuroprotective; anticonvulsant;
KW cytostatic; therapy; Alzheimer's disease; Parkinson's disease; injury;
KW Huntington's chorea; amylotropic lateral sclerosis; multiple sclerosis;
KW nervous system aging; neurodegenerative disease; immunological disease;
KW malignant glioma; medulloblastoma; neuroectodermal tumour; cancer;
KW extracellular signalling protein; HOG-791; ss.
XX
OS Homo sapiens.
XX
PN WO200134654-A1.
XX
PD 17-MAY-2001.
XX
PF 02-NOV-2000; 2000WO-US30405.
XX
PR 05-NOV-1999; 99US-0164025.
XX
PA (BIOJ) BIOGEN INC.
XX
PI Strauch K;
XX
DR WPI; 2001-329075/34.
XX
PT Novel isolated hedgehog fusion polypeptide useful for treating
PT neurological conditions such as Alzheimer's disease, Parkinson's
PT disease, Huntington's chorea, amylotropic lateral sclerosis, and
PT multiple sclerosis -
XX
PS Example 1; Page 61-62; 178pp; English.
XX

```
CC   The present invention relates to hedgehog fusion proteins. Hedgehog
CC   proteins are a family of extracellular signalling proteins that regulate
CC   various aspects of embryonic development both in vertebrates and in
CC   invertebrates. Hedgehog fusion protein is useful for the prophylaxis or
CC   treatment of any condition or disease state for which a hedgehog or
CC   patched protein constituent is efficacious and in the diagnosis of
CC   constituents or conditions of disease states in biological system or
CC   specimens and for diagnostic purposes in non-physiological systems.
CC   Hedgehog fusion protein is useful for treating neurological conditions
CC   due to injury, aging of nervous system, including Alzheimer's disease,
CC   chronic neurodegenerative diseases of the nervous system, including
CC   Parkinson's disease, Huntington's chorea, amylotropic lateral sclerosis
CC   and chronic immunological diseases of nervous system including multiple
CC   sclerosis and malignant gliomas, medulloblastomas, neuroectodermal
CC   tumours and to specifically target medical therapies against cancers and
CC   tumours which express the receptor for the protein. The present sequence
CC   is human oligonucleotide HOG-791 used to construct pMMC23 plasmid which
CC   is used in the invention.
XX
SQ   Sequence 47 BP; 11 A; 13 C; 20 G; 3 T; 0 other;

  Query Match             2.8%;  Score 43.8;  DB 22;  Length 47;
  Best Local Similarity   95.7%;  Pred. No. 81;
  Matches   45;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy    225 GACCGGGCAGGGGGTTCGGGAAGAGGAGGCACCCCAAAAAGCTGACC 271
          | |||||||||||||||||| |||||||||||||||||||||||||
Db      1 GCCCGGGCAGGGGGTTCGGGAGGAGGAGGCACCCCAAAAAGCTGACC 47


RESULT 7
AAD09077
ID   AAD09077 standard; DNA; 45 BP.
XX
AC   AAD09077;
XX
DT   04-SEP-2001  (first entry)
XX
DE   Human oligonucleotide HOG-799 used to construct pMMC22.
XX
KW   Human; hedgehog protein; nootropic; neuroprotective; anticonvulsant;
KW   cytostatic; therapy; Alzheimer's disease; Parkinson's disease; injury;
KW   Huntington's chorea; amylotropic lateral sclerosis; multiple sclerosis;
KW   nervous system aging; neurodegenerative disease; immunological disease;
KW   malignant glioma; medulloblastoma; neuroectodermal tumour; cancer;
KW   extracellular signalling protein; HOG-799; ss.
XX
OS   Homo sapiens.
XX
PN   WO200134654-A1.
XX
PD   17-MAY-2001.
XX
PF   02-NOV-2000; 2000WO-US30405.
XX
PR   05-NOV-1999;   99US-0164025.
XX
PA   (BIOJ ) BIOGEN INC.
XX
PI   Strauch K;
XX
DR   WPI; 2001-329075/34.
XX
PT   Novel isolated hedgehog fusion polypeptide useful for treating
PT   neurological conditions such as Alzheimer's disease, Parkinson's
PT   disease, Huntington's chorea, amylotropic lateral sclerosis, and
PT   multiple sclerosis -
XX
PS   Example 1; Page 62; 178pp; English.
XX
CC   The present invention relates to hedgehog fusion proteins. Hedgehog
CC   proteins are a family of extracellular signalling proteins that regulate
CC   various aspects of embryonic development both in vertebrates and in
CC   invertebrates. Hedgehog fusion protein is useful for the prophylaxis or
CC   treatment of any condition or disease state for which a hedgehog or
CC   patched protein constituent is efficacious and in the diagnosis of
CC   constituents or conditions of disease states in biological system or
CC   specimens and for diagnostic purposes in non-physiological systems.
CC   Hedgehog fusion protein is useful for treating neurological conditions
CC   due to injury, aging of nervous system, including Alzheimer's disease,
CC   chronic neurodegenerative diseases of the nervous system, including
CC   Parkinson's disease, Huntington's chorea, amylotropic lateral sclerosis
CC   and chronic immunological diseases of nervous system including multiple
CC   sclerosis and malignant gliomas, medulloblastomas, neuroectodermal
CC   tumours and to specifically target medical therapies against cancers and
CC   tumours which express the receptor for the protein. The present sequence
CC   is human oligonucleotide HOG-799 used to construct pMMC22, pMMC23, pMMC25
CC   and pMMC26 plasmids which are used in the invention.
XX
SQ   Sequence 45 BP; 12 A; 14 C; 10 G; 9 T; 0 other;

  Query Match             2.8%;  Score 43.4;  DB 22;  Length 45;
  Best Local Similarity   97.8%;  Pred. No. 95;
  Matches   44;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy    272 CCTTTAGCCTACAAGCAGTTTATCCCCAATGTGGCCGAGAAGACC 316
          |||||||||||||||||||||||||||| ||||||||||||||||
Db      1 CCTTTAGCCTACAAGCAGTTTATCCCCAAGGTGGCCGAGAAGACC 45


RESULT 8
AAF27031/c
ID   AAF27031 standard; DNA; 48 BP.
XX
AC   AAF27031;
XX
DT   30-MAR-2001  (first entry)
XX
DE   Human Sonic hedgehog (Shh) mutagenic primer, SEQ ID NO:35.
XX
KW   Sonic hedgehog; Shh; polymer conjugate; polyalkene glycol group;
KW   bioavailibility; formulation; neurological disorder;
KW   inflammatory disorder; autoimmune disorder; cancer;
KW   neurodegenerative disorder; Parkinson's disease; Huntington's disease;
KW   Alzheimer's disease; neurological injury; stroke; multiple sclerosis;
KW   malignant glioma; medulloblastoma; neuroectodermal tumour;
KW   mutagenic primer; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200073337-A1.
XX
PD   07-DEC-2000.
XX
PF   26-MAY-2000; 2000WO-US14741.
XX
PR   01-JUN-1999;   99US-0137011.
PR   13-AUG-1999;   99US-0149016.
XX
PA   (BIOJ ) BIOGEN INC.
XX
PI   Pepinsky RB,  Taylor F,  Garber E;
XX
DR   WPI; 2001-049927/06.
XX
PT   Modified hedgehog protein, useful in the treatment of Parkinson's
PT   disease and Huntington's chorea, comprises a polymer containing a
PT   polyalkylene glycol group linked to any residue other than the
PT   N-terminal and lysine residues -
XX
PS   Example 6; Page 77; 157pp; English.
XX
CC   The invention relates to novel polymer conjugates of hedgehog proteins
CC   which have increased bioavailability. The hedgehog proteins are
CC   conjugated to a non-naturally-occurring polymer comprising a polyalkylene
```

CC glycol group, with the proviso that the polymer is not conjugated to the
CC N-terminus, or to lysine residues of the hedgehog protein. The hedgehog
CC protein used in the conjugate may be a wild-type or mutant Sonic hedgehog
CC (Shh), Indian hedgehog (Ihh) or Desert hedgehog (Dhh) protein, or may be
CC a hedgehog fusion protein. The invention also relates to methods of
CC defining and mapping functionally important regions of a protein by
CC modifying accessible amino acid side chains, and determining the effect
CC the position and/or type of modification have on the activity of the
CC protein. The hedgehog polymer conjugates may be used in the management of
CC various medical conditions including various neurological disorders,
CC inflammatory and autoimmune diseases, and cancers. In particular, they
CC may be used to prevent preventing or ameliorate neurodegenerative
CC disorders (e.g., Parkinson's disease, Huntington's disease, Alzheimer's
CC disease); age-associated neurological disease; neurological injury and
CC trauma; immunological diseases of the nervous system (e.g., multiple
CC sclerosis); stroke; and malignant gliomas, medulloblastomas and
CC neuroectodermal tumours. The modifications made to the hedgehog protein
CC may result in increased half-life, altered tissue distribution (such as
CC an improved ability to stay in the vasculature for longer periods of
CC time), increased stability in solution, protection from proteolytic
CC degradation, or reduced immunogenicity. In particular, the ability to
CC remain in the vasculature for prolonged periods may allow a hedgehog
CC protein of the invention to cross the blood-brain barrier, and an
CC increased thermal stability would be an advantage when formulating the
CC hedgehog protein in powder form. The present sequence represents a
CC human Sonic hedgehog mutagenic primer used in an exemplification of the
CC invention.
XX
SQ Sequence 48 BP; 10 A; 13 C; 15 G; 10 T; 0 other;

```
  Query Match             2.7%;  Score 43.2;  DB 22;  Length 48;
  Best Local Similarity   93.8%;  Pred. No. 1e+02;
  Matches   45;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy     278 GCCTACAAGCAGTTTATCCCCAATGTGGCCGAGAAGACCCTAGGCGCC 325
           |||||||||||||||||||||  |||||| ||||||||||||||||||
Db      48 GCCTACAAGCAGTTTATCCCCTGTGTGGCTGAGAAGACCCTAGGCGCC 1
```

RESULT 9
AAF27034/c
ID AAF27034 standard; DNA; 48 BP.
XX
AC AAF27034;
XX
DT 30-MAR-2001 (first entry)
XX
DE Human Sonic hedgehog (Shh) mutagenic primer, SEQ ID NO:38.
XX
KW Sonic hedgehog; Shh; polymer conjugate; polyalkene glycol group;
KW bioavailibility; formulation; neurological disorder;
KW inflammatory disorder; autoimmune disorder; cancer;
KW neurodegenerative disorder; Parkinson's disease; Huntington's disease;
KW Alzheimer's disease; neurological injury; stroke; multiple sclerosis;
KW malignant glioma; medulloblastoma; neuroectodermal tumour;
KW mutagenic primer; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200073337-A1.
XX
PD 07-DEC-2000.
XX
PF 26-MAY-2000; 2000WO-US14741.
XX
PR 01-JUN-1999; 99US-0137011.
PR 13-AUG-1999; 99US-0149016.
XX
PA (BIOJ) BIOGEN INC.
XX
PI Pepinsky RB, Taylor F, Garber E;
XX
DR WPI; 2001-049927/06.
XX
PT Modified hedgehog protein, useful in the treatment of Parkinson's
PT disease and Huntington's chorea, comprises a polymer containing a
PT polyalkylene glycol group linked to any residue other than the
PT N-terminal and lysine residues -
XX
PS Example 6; Page 77; 157pp; English.
XX
CC The invention relates to novel polymer conjugates of hedgehog proteins
CC which have increased bioavailability. The hedgehog proteins are
CC conjugated to a non-naturally-occurring polymer comprising a polyalkylene
CC glycol group, with the proviso that the polymer is not conjugated to the
CC N-terminus, or to lysine residues of the hedgehog protein. The hedgehog
CC protein used in the conjugate may be a wild-type or mutant Sonic hedgehog
CC (Shh), Indian hedgehog (Ihh) or Desert hedgehog (Dhh) protein, or may be
CC a hedgehog fusion protein. The invention also relates to methods of
CC defining and mapping functionally important regions of a protein by
CC modifying accessible amino acid side chains, and determining the effect
CC the position and/or type of modification have on the activity of the
CC protein. The hedgehog polymer conjugates may be used in the management of
CC various medical conditions including various neurological disorders,
CC inflammatory and autoimmune diseases, and cancers. In particular, they
CC may be used to prevent preventing or ameliorate neurodegenerative
CC disorders (e.g., Parkinson's disease, Huntington's disease, Alzheimer's
CC disease); age-associated neurological disease; neurological injury and
CC trauma; immunological diseases of the nervous system (e.g., multiple
CC sclerosis); stroke; and malignant gliomas, medulloblastomas and
CC neuroectodermal tumours. The modifications made to the hedgehog protein
CC may result in increased half-life, altered tissue distribution (such as
CC an improved ability to stay in the vasculature for longer periods of
CC time), increased stability in solution, protection from proteolytic
CC degradation, or reduced immunogenicity. In particular, the ability to
CC remain in the vasculature for prolonged periods may allow a hedgehog
CC protein of the invention to cross the blood-brain barrier, and an
CC increased thermal stability would be an advantage when formulating the
CC hedgehog protein in powder form. The present sequence represents a
CC human Sonic hedgehog mutagenic primer used in an exemplification of the
CC invention.
XX
SQ Sequence 48 BP; 10 A; 15 C; 7 G; 16 T; 0 other;

```
  Query Match             2.7%;  Score 43.2;  DB 22;  Length 48;
  Best Local Similarity   93.8%;  Pred. No. 1e+02;
  Matches   45;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy     398 GACATCATATTTAAGGATGAAGAAAACACCGGAGCGGACAGGCTGATG 445
           |||||||||||||||||||||||||   ||||||||||||||||||||
Db      48 GACATCATATTTAAGGATGAAGAATGTACCGGAGCGGACAGGCTGATG 1
```

RESULT 10
AAD09080/c
ID AAD09080 standard; DNA; 50 BP.
XX
AC AAD09080;
XX
DT 04-SEP-2001 (first entry)
XX
DE Human oligonucleotide HOG-806 used to construct pMMC25.
XX
KW Human; hedgehog protein; nootropic; neuroprotective; anticonvulsant;
KW cytostatic; therapy; Alzheimer's disease; Parkinson's disease; injury;
KW Huntington's chorea; amylotropic lateral sclerosis; multiple sclerosis;
KW nervous system aging; neurodegenerative disease; immunological disease;
KW malignant glioma; medulloblastoma; neuroectodermal tumour; cancer;
KW extracellular signalling protein; HOG-806; ss.
XX
OS Homo sapiens.
XX
PN WO200134654-A1.
XX
PD 17-MAY-2001.

XX
PF 02-NOV-2000; 2000WO-US30405.
XX
PR 05-NOV-1999; 99US-0164025.
XX
PA (BIOJ) BIOGEN INC.
XX
PI Strauch K;
XX
DR WPI; 2001-329075/34.
XX
PT Novel isolated hedgehog fusion polypeptide useful for treating
PT neurological conditions such as Alzheimer's disease, Parkinson's
PT disease, Huntington's chorea, amylotropic lateral sclerosis, and
PT multiple sclerosis -
XX
PS Example 1; Page 62; 178pp; English.
XX
CC The present invention relates to hedgehog fusion proteins. Hedgehog
CC proteins are a family of extracellular signalling proteins that regulate
CC various aspects of embryonic development both in vertebrates and in
CC invertebrates. Hedgehog fusion protein is useful for the prophylaxis or
CC treatment of any condition or disease state for which a hedgehog or
CC patched protein constituent is efficacious and in the diagnosis of
CC constituents or conditions of disease states in biological system or
CC specimens and for diagnostic purposes in non-physiological systems.
CC Hedgehog fusion protein is useful for treating neurological conditions
CC due to injury, aging of nervous system, including Alzheimer's disease,
CC chronic neurodegenerative diseases of the nervous system, including
CC Parkinson's disease, Huntington's chorea, amylotropic lateral sclerosis
CC and chronic immunological diseases of nervous system including multiple
CC sclerosis and malignant gliomas, medulloblastomas, neuroectodermal
CC tumours and to specifically target medical therapies against cancers and
CC tumours which express the receptor for the protein. The present sequence
CC is human oligonucleotide HOG-806 used to construct pMMC25 plasmid which
CC is used in the invention.
XX
SQ Sequence 50 BP; 6 A; 16 C; 16 G; 12 T; 0 other;

Query Match 2.7%; Score 42; DB 22; Length 50;
Best Local Similarity 90.0%; Pred. No. 1.6e+02;
Matches 45; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

Qy 228 CGGGCAGGGGGTTCGGGAAGAGGAGGCACCCCAAAAAGCTGACCCCTTTA 277
||||||||||||||||| || | ||||||||||||||||||||||||||
Db 50 CGGGCAGGGGGTTCGGGCAGCAGCAGCACCCCAAAAAGCTGACCCCTTTA 1

RESULT 11
AAD09082/c
ID AAD09082 standard; DNA; 43 BP.
XX
AC AAD09082;
XX
DT 04-SEP-2001 (first entry)
XX
DE Human oligonucleotide HOG-808 used to construct pMMC22.
XX
KW Human; hedgehog protein; nootropic; neuroprotective; anticonvulsant;
KW cytostatic; therapy; Alzheimer's disease; Parkinson's disease; injury;
KW Huntington's chorea; amylotropic lateral sclerosis; multiple sclerosis;
KW nervous system aging; neurodegenerative disease; immunological disease;
KW malignant glioma; medulloblastoma; neuroectodermal tumour; cancer;
KW extracellular signalling protein; HOG-808; ss.
XX
OS Homo sapiens.
XX
PN WO200134654-A1.
XX
PD 17-MAY-2001.
XX
PF 02-NOV-2000; 2000WO-US30405.
XX
PR 05-NOV-1999; 99US-0164025.
XX
PA (BIOJ) BIOGEN INC.
XX
PI Strauch K;
XX
DR WPI; 2001-329075/34.
XX
PT Novel isolated hedgehog fusion polypeptide useful for treating
PT neurological conditions such as Alzheimer's disease, Parkinson's
PT disease, Huntington's chorea, amylotropic lateral sclerosis, and
PT multiple sclerosis -
XX
PS Example 1; Page 62; 178pp; English.
XX
CC The present invention relates to hedgehog fusion proteins. Hedgehog
CC proteins are a family of extracellular signalling proteins that regulate
CC various aspects of embryonic development both in vertebrates and in
CC invertebrates. Hedgehog fusion protein is useful for the prophylaxis or
CC treatment of any condition or disease state for which a hedgehog or
CC patched protein constituent is efficacious and in the diagnosis of
CC constituents or conditions of disease states in biological system or
CC specimens and for diagnostic purposes in non-physiological systems.
CC Hedgehog fusion protein is useful for treating neurological conditions
CC due to injury, aging of nervous system, including Alzheimer's disease,
CC chronic neurodegenerative diseases of the nervous system, including
CC Parkinson's disease, Huntington's chorea, amylotropic lateral sclerosis
CC and chronic immunological diseases of nervous system including multiple
CC sclerosis and malignant gliomas, medulloblastomas, neuroectodermal
CC tumours and to specifically target medical therapies against cancers and
CC tumours which express the receptor for the protein. The present sequence
CC is human oligonucleotide HOG-808 used to construct pMMC22, pMMC23, pMMC25
CC and pMMC26 plasmids which are used in the invention.
XX
SQ Sequence 43 BP; 8 A; 10 C; 14 G; 11 T; 0 other;

Query Match 2.6%; Score 41.4; DB 22; Length 43;
Best Local Similarity 97.7%; Pred. No. 2.1e+02;
Matches 42; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 278 GCCTACAAGCAGTTTATCCCCAATGTGGCCGAGAAGACCCTAG 320
|||||||||||||| ||||||||||||||||||||||||||||
Db 43 GCCTACAAGCAGTTTCTCCCCAATGTGGCCGAGAAGACCCTAG 1

RESULT 12
AAD09076
ID AAD09076 standard; DNA; 47 BP.
XX
AC AAD09076;
XX
DT 04-SEP-2001 (first entry)
XX
DE Human oligonucleotide HOG-797 used to construct pMMC26.
XX
KW Human; hedgehog protein; nootropic; neuroprotective; anticonvulsant;
KW cytostatic; therapy; Alzheimer's disease; Parkinson's disease; injury;
KW Huntington's chorea; amylotropic lateral sclerosis; multiple sclerosis;
KW nervous system aging; neurodegenerative disease; immunological disease;
KW malignant glioma; medulloblastoma; neuroectodermal tumour; cancer;
KW extracellular signalling protein; HOG-797; ss.
XX
OS Homo sapiens.
XX
PN WO200134654-A1.
XX
PD 17-MAY-2001.
XX
PF 02-NOV-2000; 2000WO-US30405.
XX
PR 05-NOV-1999; 99US-0164025.
XX
PA (BIOJ) BIOGEN INC.

```
XX
PI   Strauch K;
XX
DR   WPI; 2001-329075/34.
XX
PT   Novel isolated hedgehog fusion polypeptide useful for treating
PT   neurological conditions such as Alzheimer's disease, Parkinson's
PT   disease, Huntington's chorea, amylotropic lateral sclerosis, and
PT   multiple sclerosis -
XX
PS   Example 1; Page 62; 178pp; English.
XX
CC   The present invention relates to hedgehog fusion proteins. Hedgehog
CC   proteins are a family of extracellular signalling proteins that regulate
CC   various aspects of embryonic development both in vertebrates and in
CC   invertebrates. Hedgehog fusion protein is useful for the prophylaxis or
CC   treatment of any condition or disease state for which a hedgehog or
CC   patched protein constituent is efficacious and in the diagnosis of
CC   constituents or conditions of disease states in biological system or
CC   specimens and for diagnostic purposes in non-physiological systems.
CC   Hedgehog fusion protein is useful for treating neurological conditions
CC   due to injury, aging of nervous system, including Alzheimer's disease,
CC   chronic neurodegenerative diseases of the nervous system, including
CC   Parkinson's disease, Huntington's chorea, amylotropic lateral sclerosis
CC   and chronic immunological diseases of nervous system including multiple
CC   sclerosis and malignant gliomas, medulloblastomas, neuroectodermal
CC   tumours and to specifically target medical therapies against cancers and
CC   tumours which express the receptor for the protein. The present sequence
CC   is human oligonucleotide HOG-797 used to construct pMMC23 plasmid which
CC   is used in the invention.
XX
SQ   Sequence 47 BP; 9 A; 15 C; 20 G; 3 T; 0 other;

  Query Match             2.6%;  Score 40.6;  DB 22;  Length 47;
  Best Local Similarity   91.5%;  Pred. No. 2.8e+02;
  Matches   43;  Conservative    0;  Mismatches    4;  Indels    0;  Gaps    0;

Qy     225 GACCGGGCAGGGGGTTCGGGAAGAGGAGGCACCCCAAAAAGCTGACC 271
           | ||||||||||||||||||||||||||||||||| |  ||||||||
Db       1 GCCCGGGCAGGGGGTTCGGGAAGAGGAGGCACCCCCAGCAGCTGACC 47


RESULT 13
AAD09075
ID   AAD09075 standard; DNA; 47 BP.
XX
AC   AAD09075;
XX
DT   04-SEP-2001  (first entry)
XX
DE   Human oligonucleotide HOG-795 used to construct pMMC25 plasmid.
XX
KW   Human; hedgehog protein; nootropic; neuroprotective; anticonvulsant;
KW   cytostatic; therapy; Alzheimer's disease; Parkinson's disease; injury;
KW   Huntington's chorea; amylotropic lateral sclerosis; multiple sclerosis;
KW   nervous system aging; neurodegenerative disease; immunological disease;
KW   malignant glioma; medulloblastoma; neuroectodermal tumour; cancer;
KW   extracellular signalling protein; HOG-795; ss.
XX
OS   Homo sapiens.
XX
PN   WO200134654-A1.
XX
PD   17-MAY-2001.
XX
PF   02-NOV-2000; 2000WO-US30405.
XX
PR   05-NOV-1999;   99US-0164025.
XX
PA   (BIOJ ) BIOGEN INC.
XX
PI   Strauch K;
XX
DR   WPI; 2001-329075/34.
XX
PT   Novel isolated hedgehog fusion polypeptide useful for treating
PT   neurological conditions such as Alzheimer's disease, Parkinson's
PT   disease, Huntington's chorea, amylotropic lateral sclerosis, and
PT   multiple sclerosis -
XX
PS   Example 1; Page 62; 178pp; English.
XX
CC   The present invention relates to hedgehog fusion proteins. Hedgehog
CC   proteins are a family of extracellular signalling proteins that regulate
CC   various aspects of embryonic development both in vertebrates and in
CC   invertebrates. Hedgehog fusion protein is useful for the prophylaxis or
CC   treatment of any condition or disease state for which a hedgehog or
CC   patched protein constituent is efficacious and in the diagnosis of
CC   constituents or conditions of disease states in biological system or
CC   specimens and for diagnostic purposes in non-physiological systems.
CC   Hedgehog fusion protein is useful for treating neurological conditions
CC   due to injury, aging of nervous system, including Alzheimer's disease,
CC   chronic neurodegenerative diseases of the nervous system, including
CC   Parkinson's disease, Huntington's chorea, amylotropic lateral sclerosis
CC   and chronic immunological diseases of nervous system including multiple
CC   sclerosis and malignant gliomas, medulloblastomas, neuroectodermal
CC   tumours and to specifically target medical therapies against cancers and
CC   tumours which express the receptor for the protein. The present sequence
CC   is human oligonucleotide HOG-795 used to construct pMMC25 plasmid which
CC   is used in the invention.
XX
SQ   Sequence 47 BP; 11 A; 16 C; 17 G; 3 T; 0 other;

  Query Match             2.4%;  Score 37.4;  DB 22;  Length 47;
  Best Local Similarity   87.2%;  Pred. No. 9.6e+02;
  Matches   41;  Conservative    0;  Mismatches    6;  Indels    0;  Gaps    0;

Qy     225 GACCGGGCAGGGGGTTCGGGAAGAGGAGGCACCCCAAAAAGCTGACC 271
           | |||||||||||||||||| ||  |  ||||||||||||||||||
Db       1 GCCCGGGCAGGGGGTTCGGGCAGCAGCAGCACCCCAAAAAGCTGACC 47


RESULT 14
AAF27032/c
ID   AAF27032 standard; DNA; 42 BP.
XX
AC   AAF27032;
XX
DT   30-MAR-2001  (first entry)
XX
DE   Human Sonic hedgehog (Shh) mutagenic primer, SEQ ID NO:36.
XX
KW   Sonic hedgehog; Shh; polymer conjugate; polyalkene glycol group;
KW   bioavailibility; formulation; neurological disorder;
KW   inflammatory disorder; autoimmune disorder; cancer;
KW   neurodegenerative disorder; Parkinson's disease; Huntington's disease;
KW   Alzheimer's disease; neurological injury; stroke; multiple sclerosis;
KW   malignant glioma; medulloblastoma; neuroectodermal tumour;
KW   mutagenic primer; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200073337-A1.
XX
PD   07-DEC-2000.
XX
PF   26-MAY-2000; 2000WO-US14741.
XX
PR   01-JUN-1999;   99US-0137011.
PR   13-AUG-1999;   99US-0149016.
XX
PA   (BIOJ ) BIOGEN INC.
XX
PI   Pepinsky RB,  Taylor F,  Garber E;
XX
```

DR WPI; 2001-049927/06.
XX
PT Modified hedgehog protein, useful in the treatment of Parkinson's
PT disease and Huntington's chorea, comprises a polymer containing a
PT polyalkylene glycol group linked to any residue other than the
PT N-terminal and lysine residues -
XX
PS Example 6; Page 77; 157pp; English.
XX
CC The invention relates to novel polymer conjugates of hedgehog proteins
CC which have increased bioavailability. The hedgehog proteins are
CC conjugated to a non-naturally-occurring polymer comprising a polyalkylene
CC glycol group, with the proviso that the polymer is not conjugated to the
CC N-terminus, or to lysine residues of the hedgehog protein. The hedgehog
CC protein used in the conjugate may be a wild-type or mutant Sonic hedgehog
CC (Shh), Indian hedgehog (Ihh) or Desert hedgehog (Dhh) protein, or may be
CC a hedgehog fusion protein. The invention also relates to methods of
CC defining and mapping functionally important regions of a protein by
CC modifying accessible amino acid side chains, and determining the effect
CC the position and/or type of modification have on the activity of the
CC protein. The hedgehog polymer conjugates may be used in the management of
CC various medical conditions including various neurological disorders,
CC inflammatory and autoimmune diseases, and cancers. In particular, they
CC may be used to prevent preventing or ameliorate neurodegenerative
CC disorders (e.g., Parkinson's disease, Huntington's disease, Alzheimer's
CC disease); age-associated neurological disease; neurological injury and
CC trauma; immunological diseases of the nervous system (e.g., multiple
CC sclerosis); stroke; and malignant gliomas, medulloblastomas and
CC neuroectodermal tumours. The modifications made to the hedgehog protein
CC may result in increased half-life, altered tissue distribution (such as
CC an improved ability to stay in the vasculature for longer periods of
CC time), increased stability in solution, protection from proteolytic
CC degradation, or reduced immunogenicity. In particular, the ability to
CC remain in the vasculature for prolonged periods may allow a hedgehog
CC protein of the invention to cross the blood-brain barrier, and an
CC increased thermal stability would be an advantage when formulating the
CC hedgehog protein in powder form. The present sequence represents a
CC human Sonic hedgehog mutagenic primer used in an exemplification of the
CC invention.
XX
SQ Sequence 42 BP; 8 A; 13 C; 9 G; 12 T; 0 other;

Query Match 2.4%; Score 37.2; DB 22; Length 42;
Best Local Similarity 92.9%; Pred. No. 1e+03;
Matches 39; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 338 GAAGGGAAGATCTCCAGAAACTCCGAGCGATTTAAGGAACTC 379
||||||||||||||||| |||||||||||||||||||
Db 42 GAAGGGAAGATCTCCAGGTGCTCCGAGCGATTTAAGGAACTC 1

RESULT 15
AAF27036/c
ID AAF27036 standard; DNA; 42 BP.
XX
AC AAF27036;
XX
DT 30-MAR-2001 (first entry)
XX
DE Human Sonic hedgehog (Shh) mutagenic primer, SEQ ID NO:40.
XX
KW Sonic hedgehog; Shh; polymer conjugate; polyalkene glycol group;
KW bioavailibility; formulation; neurological disorder;
KW inflammatory disorder; autoimmune disorder; cancer;
KW neurodegenerative disorder; Parkinson's disease; Huntington's disease;
KW Alzheimer's disease; neurological injury; stroke; multiple sclerosis;
KW malignant glioma; medulloblastoma; neuroectodermal tumour;
KW mutagenic primer; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200073337-A1.
XX
PD 07-DEC-2000.
XX
PF 26-MAY-2000; 2000WO-US14741.
XX
PR 01-JUN-1999; 99US-0137011.
PR 13-AUG-1999; 99US-0149016.
XX
PA (BIOJ) BIOGEN INC.
XX
PI Pepinsky RB, Taylor F, Garber E;
XX
DR WPI; 2001-049927/06.
XX
PT Modified hedgehog protein, useful in the treatment of Parkinson's
PT disease and Huntington's chorea, comprises a polymer containing a
PT polyalkylene glycol group linked to any residue other than the
PT N-terminal and lysine residues -
XX
PS Example 6; Page 77; 157pp; English.
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CC which have increased bioavailability. The hedgehog proteins are
CC conjugated to a non-naturally-occurring polymer comprising a polyalkylene
CC glycol group, with the proviso that the polymer is not conjugated to the
CC N-terminus, or to lysine residues of the hedgehog protein. The hedgehog
CC protein used in the conjugate may be a wild-type or mutant Sonic hedgehog
CC (Shh), Indian hedgehog (Ihh) or Desert hedgehog (Dhh) protein, or may be
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CC defining and mapping functionally important regions of a protein by
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CC the position and/or type of modification have on the activity of the
CC protein. The hedgehog polymer conjugates may be used in the management of
CC various medical conditions including various neurological disorders,
CC inflammatory and autoimmune diseases, and cancers. In particular, they
CC may be used to prevent preventing or ameliorate neurodegenerative
CC disorders (e.g., Parkinson's disease, Huntington's disease, Alzheimer's
CC disease); age-associated neurological disease; neurological injury and
CC trauma; immunological diseases of the nervous system (e.g., multiple
CC sclerosis); stroke; and malignant gliomas, medulloblastomas and
CC neuroectodermal tumours. The modifications made to the hedgehog protein
CC may result in increased half-life, altered tissue distribution (such as
CC an improved ability to stay in the vasculature for longer periods of
CC time), increased stability in solution, protection from proteolytic
CC degradation, or reduced immunogenicity. In particular, the ability to
CC remain in the vasculature for prolonged periods may allow a hedgehog
CC protein of the invention to cross the blood-brain barrier, and an
CC increased thermal stability would be an advantage when formulating the
CC hedgehog protein in powder form. The present sequence represents a
CC human Sonic hedgehog mutagenic primer used in an exemplification of the
CC invention.
XX
SQ Sequence 42 BP; 11 A; 14 C; 9 G; 8 T; 0 other;

Query Match 2.4%; Score 37.2; DB 22; Length 42;
Best Local Similarity 92.9%; Pred. No. 1e+03;
Matches 39; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 474 CTTTGGCCATCTCGGTGATGAACCAGTGGCCAGGAGTGAAAC 515
||||||||||||||||||| |||||||||||||||||||
Db 42 CTTTGGCCATCTCGGTGATGTGTCAGTGGCCAGGAGTGAAAC 1

RESULT 16
AAF27039/c
ID AAF27039 standard; DNA; 38 BP.
XX
AC AAF27039;
XX
DT 30-MAR-2001 (first entry)
XX
DE Human Sonic hedgehog (Shh) mutagenic primer, SEQ ID NO:43.
XX

KW Sonic hedgehog; Shh; polymer conjugate; polyalkene glycol group;
KW bioavailibility; formulation; neurological disorder;
KW inflammatory disorder; autoimmune disorder; cancer;
KW neurodegenerative disorder; Parkinson's disease; Huntington's disease;
KW Alzheimer's disease; neurological injury; stroke; multiple sclerosis;
KW malignant glioma; medulloblastoma; neuroectodermal tumour;
KW mutagenic primer; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200073337-A1.
XX
PD 07-DEC-2000.
XX
PF 26-MAY-2000; 2000WO-US14741.
XX
PR 01-JUN-1999; 99US-0137011.
PR 13-AUG-1999; 99US-0149016.
XX
PA (BIOJ) BIOGEN INC.
XX
PI Pepinsky RB, Taylor F, Garber E;
XX
DR WPI; 2001-049927/06.
XX
PT Modified hedgehog protein, useful in the treatment of Parkinson's
PT disease and Huntington's chorea, comprises a polymer containing a
PT polyalkylene glycol group linked to any residue other than the
PT N-terminal and lysine residues -
XX
PS Example 6; Page 77; 157pp; English.
XX
CC The invention relates to novel polymer conjugates of hedgehog proteins
CC which have increased bioavailability. The hedgehog proteins are
CC conjugated to a non-naturally-occurring polymer comprising a polyalkylene
CC glycol group, with the proviso that the polymer is not conjugated to the
CC N-terminus, or to lysine residues of the hedgehog protein. The hedgehog
CC protein used in the conjugate may be a wild-type or mutant Sonic hedgehog
CC (Shh), Indian hedgehog (Ihh) or Desert hedgehog (Dhh) protein, or may be
CC a hedgehog fusion protein. The invention also relates to methods of
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CC the position and/or type of modification have on the activity of the
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CC disorders (e.g., Parkinson's disease, Huntington's disease, Alzheimer's
CC disease); age-associated neurological disease; neurological injury and
CC trauma; immunological diseases of the nervous system (e.g., multiple
CC sclerosis); stroke; and malignant gliomas, medulloblastomas and
CC neuroectodermal tumours. The modifications made to the hedgehog protein
CC may result in increased half-life, altered tissue distribution (such as
CC an improved ability to stay in the vasculature for longer periods of
CC time), increased stability in solution, protection from proteolytic
CC degradation, or reduced immunogenicity. In particular, the ability to
CC remain in the vasculature for prolonged periods may allow a hedgehog
CC protein of the invention to cross the blood-brain barrier, and an
CC increased thermal stability would be an advantage when formulating the
CC hedgehog protein in powder form. The present sequence represents a
CC human Sonic hedgehog mutagenic primer used in an exemplification of the
CC invention.
XX
SQ Sequence 38 BP; 8 A; 11 C; 9 G; 10 T; 0 other;

Query Match 2.3%; Score 36.4; DB 22; Length 38;
Best Local Similarity 97.4%; Pred. No. 1.4e+03;
Matches 37; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 662 GACTGGGTGTACTACGAGTCCAAGGCACATATCCACTG 699
||||||||||||||||||| ||||||||||||||||||
Db 38 GACTGGGTGTACTACGAGTGCAAGGCACATATCCACTG 1

RESULT 17
AAF27025/c
ID AAF27025 standard; DNA; 49 BP.
XX
AC AAF27025;
XX
DT 30-MAR-2001 (first entry)
XX
DE Human Sonic hedgehog (Shh) mutagenic primer, SEQ ID NO:29.
XX
KW Sonic hedgehog; Shh; polymer conjugate; polyalkene glycol group;
KW bioavailibility; formulation; neurological disorder;
KW inflammatory disorder; autoimmune disorder; cancer;
KW neurodegenerative disorder; Parkinson's disease; Huntington's disease;
KW Alzheimer's disease; neurological injury; stroke; multiple sclerosis;
KW malignant glioma; medulloblastoma; neuroectodermal tumour;
KW mutagenic primer; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200073337-A1.
XX
PD 07-DEC-2000.
XX
PF 26-MAY-2000; 2000WO-US14741.
XX
PR 01-JUN-1999; 99US-0137011.
PR 13-AUG-1999; 99US-0149016.
XX
PA (BIOJ) BIOGEN INC.
XX
PI Pepinsky RB, Taylor F, Garber E;
XX
DR WPI; 2001-049927/06.
XX
PT Modified hedgehog protein, useful in the treatment of Parkinson's
PT disease and Huntington's chorea, comprises a polymer containing a
PT polyalkylene glycol group linked to any residue other than the
PT N-terminal and lysine residues -
XX
PS Example 2; Page 67; 157pp; English.
XX
CC The invention relates to novel polymer conjugates of hedgehog proteins
CC which have increased bioavailability. The hedgehog proteins are
CC conjugated to a non-naturally-occurring polymer comprising a polyalkylene
CC glycol group, with the proviso that the polymer is not conjugated to the
CC N-terminus, or to lysine residues of the hedgehog protein. The hedgehog
CC protein used in the conjugate may be a wild-type or mutant Sonic hedgehog
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CC neuroectodermal tumours. The modifications made to the hedgehog protein
CC may result in increased half-life, altered tissue distribution (such as
CC an improved ability to stay in the vasculature for longer periods of
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CC degradation, or reduced immunogenicity. In particular, the ability to
CC remain in the vasculature for prolonged periods may allow a hedgehog
CC protein of the invention to cross the blood-brain barrier, and an
CC increased thermal stability would be an advantage when formulating the
CC hedgehog protein in powder form. The present sequence represents a

CC human Sonic hedgehog mutagenic primer used in an exemplification of the
CC invention.
XX
SQ Sequence 49 BP; 8 A; 18 C; 9 G; 14 T; 0 other;

Query Match 2.3%; Score 36; DB 22; Length 49;
Best Local Similarity 88.6%; Pred. No. 1.7e+03;
Matches 39; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

Qy 703 GGTGAAAGCAGAGAACTCGGTGGCGGCCAAATCGGGAGGCTGCT 746
||||||||||||||||||||| || ||||||||||||| |
Db 49 GGTGAAAGCAGAGAACTCGGTGTGCGCAAAATCGGGAGGCTGAT 6

RESULT 18
AAF27038/c
ID AAF27038 standard; DNA; 39 BP.
XX
AC AAF27038;
XX
DT 30-MAR-2001 (first entry)
XX
DE Human Sonic hedgehog (Shh) mutagenic primer, SEQ ID NO:42.
XX
KW Sonic hedgehog; Shh; polymer conjugate; polyalkene glycol group;
KW bioavailibility; formulation; neurological disorder;
KW inflammatory disorder; autoimmune disorder; cancer;
KW neurodegenerative disorder; Parkinson's disease; Huntington's disease;
KW Alzheimer's disease; neurological injury; stroke; multiple sclerosis;
KW malignant glioma; medulloblastoma; neuroectodermal tumour;
KW mutagenic primer; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200073337-A1.
XX
PD 07-DEC-2000.
XX
PF 26-MAY-2000; 2000WO-US14741.
XX
PR 01-JUN-1999; 99US-0137011.
PR 13-AUG-1999; 99US-0149016.
XX
PA (BIOJ) BIOGEN INC.
XX
PI Pepinsky RB, Taylor F, Garber E;
XX
DR WPI; 2001-049927/06.
XX
PT Modified hedgehog protein, useful in the treatment of Parkinson's
PT disease and Huntington's chorea, comprises a polymer containing a
PT polyalkylene glycol group linked to any residue other than the
PT N-terminal and lysine residues -
XX
PS Example 6; Page 77; 157pp; English.
XX
CC The invention relates to novel polymer conjugates of hedgehog proteins
CC which have increased bioavailability. The hedgehog proteins are
CC conjugated to a non-naturally-occurring polymer comprising a polyalkylene
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CC protein used in the conjugate may be a wild-type or mutant Sonic hedgehog
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CC an improved ability to stay in the vasculature for longer periods of
CC time), increased stability in solution, protection from proteolytic
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CC remain in the vasculature for prolonged periods may allow a hedgehog
CC protein of the invention to cross the blood-brain barrier, and an
CC increased thermal stability would be an advantage when formulating the
CC hedgehog protein in powder form. The present sequence represents a
CC human Sonic hedgehog mutagenic primer used in an exemplification of the
CC invention.
XX
SQ Sequence 39 BP; 7 A; 12 C; 13 G; 7 T; 0 other;

Query Match 2.3%; Score 35.8; DB 22; Length 39;
Best Local Similarity 94.9%; Pred. No. 1.8e+03;
Matches 37; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 597 CCACGTCTGACCGCGACCGCAGCAAGTACGGCATGCTGG 635
|||||||||||||||| ||| ||||||||||||||||||
Db 39 CCACGTCTGACCGCGATCGCTGCAAGTACGGCATGCTGG 1

RESULT 19
AAF27035/c
ID AAF27035 standard; DNA; 42 BP.
XX
AC AAF27035;
XX
DT 30-MAR-2001 (first entry)
XX
DE Human Sonic hedgehog (Shh) mutagenic primer, SEQ ID NO:39.
XX
KW Sonic hedgehog; Shh; polymer conjugate; polyalkene glycol group;
KW bioavailibility; formulation; neurological disorder;
KW inflammatory disorder; autoimmune disorder; cancer;
KW neurodegenerative disorder; Parkinson's disease; Huntington's disease;
KW Alzheimer's disease; neurological injury; stroke; multiple sclerosis;
KW malignant glioma; medulloblastoma; neuroectodermal tumour;
KW mutagenic primer; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200073337-A1.
XX
PD 07-DEC-2000.
XX
PF 26-MAY-2000; 2000WO-US14741.
XX
PR 01-JUN-1999; 99US-0137011.
PR 13-AUG-1999; 99US-0149016.
XX
PA (BIOJ) BIOGEN INC.
XX
PI Pepinsky RB, Taylor F, Garber E;
XX
DR WPI; 2001-049927/06.
XX
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PT N-terminal and lysine residues -
XX
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XX
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CC hedgehog protein in powder form. The present sequence represents a
CC human Sonic hedgehog mutagenic primer used in an exemplification of the
CC invention.
XX
SQ Sequence 42 BP; 11 A; 11 C; 10 G; 10 T; 0 other;

Query Match 2.3%; Score 35.6; DB 22; Length 42;
Best Local Similarity 90.5%; Pred. No. 1.9e+03;
Matches 38; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 445 GACTCAGAGGTGTAAGGACAAGTTGAACGCTTTGGCCATCTC 486
||||||||||||||||||| || ||||||||||||||||
Db 42 GACTCAGAGGTGTAAGGACTGCTTAAACGCTTTGGCCATCTC 1

RESULT 20
AAF27037/c
ID AAF27037 standard; DNA; 37 BP.
XX
AC AAF27037;
XX
DT 30-MAR-2001 (first entry)
XX
DE Human Sonic hedgehog (Shh) mutagenic primer, SEQ ID NO:41.
XX
KW Sonic hedgehog; Shh; polymer conjugate; polyalkene glycol group;
KW bioavailibility; formulation; neurological disorder;
KW inflammatory disorder; autoimmune disorder; cancer;
KW neurodegenerative disorder; Parkinson's disease; Huntington's disease;
KW Alzheimer's disease; neurological injury; stroke; multiple sclerosis;
KW malignant glioma; medulloblastoma; neuroectodermal tumour;
KW mutagenic primer; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200073337-A1.
XX
PD 07-DEC-2000.
XX
PF 26-MAY-2000; 2000WO-US14741.
XX
PR 01-JUN-1999; 99US-0137011.
PR 13-AUG-1999; 99US-0149016.
XX
PA (BIOJ) BIOGEN INC.
XX
PI Pepinsky RB, Taylor F, Garber E;
XX
DR WPI; 2001-049927/06.
XX
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XX
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CC human Sonic hedgehog mutagenic primer used in an exemplification of the
CC invention.
XX
SQ Sequence 37 BP; 6 A; 10 C; 12 G; 9 T; 0 other;

Query Match 2.1%; Score 33.8; DB 22; Length 37;
Best Local Similarity 94.6%; Pred. No. 3.9e+03;
Matches 35; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 538 CGAAGATGGCCACCACTCAGAGGAGTCTCTGCACTAC 574
|||||||||||||||| ||||||||||||||||||
Db 37 CGAAGATGGCCACCACTGCGAGGAGTCTCTGCACTAC 1

RESULT 21
AAF27041/c
ID AAF27041 standard; DNA; 35 BP.
XX
AC AAF27041;
XX
DT 30-MAR-2001 (first entry)
XX
DE Human Sonic hedgehog (Shh) mutagenic primer, SEQ ID NO:45.
XX
KW Sonic hedgehog; Shh; polymer conjugate; polyalkene glycol group;
KW bioavailibility; formulation; neurological disorder;
KW inflammatory disorder; autoimmune disorder; cancer;
KW neurodegenerative disorder; Parkinson's disease; Huntington's disease;
KW Alzheimer's disease; neurological injury; stroke; multiple sclerosis;
KW malignant glioma; medulloblastoma; neuroectodermal tumour;
KW mutagenic primer; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200073337-A1.
XX

PD 07-DEC-2000.
XX
PF 26-MAY-2000; 2000WO-US14741.
XX
PR 01-JUN-1999; 99US-0137011.
PR 13-AUG-1999; 99US-0149016.
XX
PA (BIOJ) BIOGEN INC.
XX
PI Pepinsky RB, Taylor F, Garber E;
XX
DR WPI; 2001-049927/06.
XX
PT Modified hedgehog protein, useful in the treatment of Parkinson's
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PT polyalkylene glycol group linked to any residue other than the
PT N-terminal and lysine residues -
XX
PS Example 6; Page 77; 157pp; English.
XX
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CC which have increased bioavailability. The hedgehog proteins are
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CC may result in increased half-life, altered tissue distribution (such as
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CC degradation, or reduced immunogenicity. In particular, the ability to
CC remain in the vasculature for prolonged periods may allow a hedgehog
CC protein of the invention to cross the blood-brain barrier, and an
CC increased thermal stability would be an advantage when formulating the
CC hedgehog protein in powder form. The present sequence represents a
CC human Sonic hedgehog mutagenic primer used in an exemplification of the
CC invention.
XX
SQ Sequence 35 BP; 8 A; 15 C; 9 G; 3 T; 0 other;

Query Match 2.1%; Score 33.4; DB 22; Length 35;
Best Local Similarity 97.1%; Pred. No. 4.6e+03;
Matches 34; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 639 GCCTGGCGGTGGAGGCCGGCTTCGACTGGGTGTAC 673
|||||||||||||||||| ||||||||||||||||||
Db 35 GCCTGGCGGTGGAGGCCTGCTTCGACTGGGTGTAC 1

RESULT 22
AAF27040/c
ID AAF27040 standard; DNA; 37 BP.
XX
AC AAF27040;
XX
DT 30-MAR-2001 (first entry)
XX
DE Human Sonic hedgehog (Shh) mutagenic primer, SEQ ID NO:44.
XX
KW Sonic hedgehog; Shh; polymer conjugate; polyalkene glycol group;
KW bioavailibility; formulation; neurological disorder;
KW inflammatory disorder; autoimmune disorder; cancer;
KW neurodegenerative disorder; Parkinson's disease; Huntington's disease;
KW Alzheimer's disease; neurological injury; stroke; multiple sclerosis;
KW malignant glioma; medulloblastoma; neuroectodermal tumour;
KW mutagenic primer; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200073337-A1.
XX
PD 07-DEC-2000.
XX
PF 26-MAY-2000; 2000WO-US14741.
XX
PR 01-JUN-1999; 99US-0137011.
PR 13-AUG-1999; 99US-0149016.
XX
PA (BIOJ) BIOGEN INC.
XX
PI Pepinsky RB, Taylor F, Garber E;
XX
DR WPI; 2001-049927/06.
XX
PT Modified hedgehog protein, useful in the treatment of Parkinson's
PT disease and Huntington's chorea, comprises a polymer containing a
PT polyalkylene glycol group linked to any residue other than the
PT N-terminal and lysine residues -
XX
PS Example 6; Page 77; 157pp; English.
XX
CC The invention relates to novel polymer conjugates of hedgehog proteins
CC which have increased bioavailability. The hedgehog proteins are
CC conjugated to a non-naturally-occurring polymer comprising a polyalkylene
CC glycol group, with the proviso that the polymer is not conjugated to the
CC N-terminus, or to lysine residues of the hedgehog protein. The hedgehog
CC protein used in the conjugate may be a wild-type or mutant Sonic hedgehog
CC (Shh), Indian hedgehog (Ihh) or Desert hedgehog (Dhh) protein, or may be
CC a hedgehog fusion protein. The invention also relates to methods of
CC defining and mapping functionally important regions of a protein by
CC modifying accessible amino acid side chains, and determining the effect
CC the position and/or type of modification have on the activity of the
CC protein. The hedgehog polymer conjugates may be used in the management of
CC various medical conditions including various neurological disorders,
CC inflammatory and autoimmune diseases, and cancers. In particular, they
CC may be used to prevent preventing or ameliorate neurodegenerative
CC disorders (e.g., Parkinson's disease, Huntington's disease, Alzheimer's
CC disease); age-associated neurological disease; neurological injury and
CC trauma; immunological diseases of the nervous system (e.g., multiple
CC sclerosis); stroke; and malignant gliomas, medulloblastomas and
CC neuroectodermal tumours. The modifications made to the hedgehog protein
CC may result in increased half-life, altered tissue distribution (such as
CC an improved ability to stay in the vasculature for longer periods of
CC time), increased stability in solution, protection from proteolytic
CC degradation, or reduced immunogenicity. In particular, the ability to
CC remain in the vasculature for prolonged periods may allow a hedgehog
CC protein of the invention to cross the blood-brain barrier, and an
CC increased thermal stability would be an advantage when formulating the
CC hedgehog protein in powder form. The present sequence represents a
CC human Sonic hedgehog mutagenic primer used in an exemplification of the
CC invention.
XX
SQ Sequence 37 BP; 7 A; 8 C; 13 G; 9 T; 0 other;

Query Match 2.0%; Score 32.2; DB 22; Length 37;
Best Local Similarity 91.9%; Pred. No. 7.2e+03;
Matches 34; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 538 CGAAGATGGCCACCACTCAGAGGAGTCTCTGCACTAC 574
|||||||||||||||||| ||||||||||||||
Db 37 CGAAGATGGCCACCACTCATGCGAGTCTCTGCACTAC 1

```
RESULT 23
ABT03768/c
ID   ABT03768 standard; DNA; 27 BP.
XX
AC   ABT03768;
XX
DT   13-SEP-2002  (first entry)
XX
DE   Human SHH gene PCR primer SEQ ID NO: 289.
XX
KW   Human; cancer; neoplastic disease; tumour specific marker; cytostatic;
KW   transcription factor; PCR; primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200240716-A2.
XX
PD   23-MAY-2002.
XX
PF   13-NOV-2001; 2001WO-US43461.
XX
PR   16-NOV-2000; 2000US-249508P.
XX
PA   (CEMI-) CEMINES LLC.
XX
PI   Palm K;
XX
DR   WPI; 2002-537346/57.
XX
PT   Determining the presence of neoplastic molecular markers, by
PT   identifying the presence of markers in host test sample using array of
PT   neoplastic molecular marker specific reagents and analyzing the array
PT   of the reagents  -
XX
PS   Example 1; Page 19; 41pp; English.
XX
CC   The present invention relates to a method for determining the presence of
CC   neoplastic molecular markers in a host, involving the use of neoplastic
CC   molecular marker specific reagents to detect such markers and analysing
CC   the array of reagents, allowing the identification of the neoplastic
CC   disease present. This can be used to determine the best treatment for
CC   cancers, in particular neural cell, lung and prostate tumours. The
CC   present sequence is a PCR primer useful for detecting the coding
CC   sequences of markers of the invention.
XX
SQ   Sequence 27 BP; 3 A; 11 C; 9 G; 4 T; 0 other;

  Query Match             1.7%;  Score 27;  DB 24;  Length 27;
  Best Local Similarity   100.0%;  Pred. No. 5.4e+04;
  Matches   27;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    755 TCGGCCACGGTGCACCTGGAGCAGGGC 781
          |||||||||||||||||||||||||||
Db     27 TCGGCCACGGTGCACCTGGAGCAGGGC 1


RESULT 24
AAQ33571
ID   AAQ33571 standard; DNA; 46 BP.
XX
AC   AAQ33571;
XX
DT   02-FEB-1993  (first entry)
XX
DE   Microsatellite sequence from clone AGLA259.
XX
KW   PCR; selection; primers; OPTIPRIM; breeding; cattle; parentage;
KW   genetic mapping; traits; amplification; ss.
XX
OS   Bos taurus.
XX
PN   WO9213102-A.
XX
PD   06-AUG-1992.
XX
PF   15-JAN-1992;   92WO-US00340.
XX
PR   15-JAN-1991;   91US-0642342.
XX
PA   (GENM-) GENMARK.
XX
PI   Georges M,  Massey JM;
XX
DR   WPI; 1992-284684/34.
XX
PT   Polymorphic bovine DNA markers - used in genetic identification,
PT   gene mapping, and selective breeding
XX
PS   Table 7; Page 157; 517pp; English.
XX
CC   The sequence is that of a bovine microsatellite sequence obtd. by
CC   screening a library of bovine MboI DNA fragments of between
CC   250 and 500 bp with an (AC)15 and a (TC)15 oligonucleotide probe.
CC   One out of 50 clones cross-hybridised.  Assuming independent
CC   distribution of microsatellites and MboI sites, the frequency of
CC   (T6)n >9 microsatellites in the bovine genome is estimated at >100,
CC   000.  The sequence information for ca. 230 such bovine microsatellites
CC   is summarised in the specification and indexed herein (see below).
CC   The sequences upstream and downstream of the microsatellite sequence
CC   were used to generate the required PCR primers for in vitro
CC   amplification of the corresp. microsatellite (using the program
CC   OPTIPRIM).  The microsatellites may be used to identify individuals,
CC   for parentage testing, and in the genetic mapping of economic trait
CC   loci, or genes involved the determinism of economically important
CC   traits esp. in cattle, to allow selective breeding.
CC   See also AAQ33501-34437.
XX
SQ   Sequence 46 BP; 18 A; 2 C; 26 G; 0 U; 0 other;

  Query Match             1.7%;  Score 26.8;  DB 13;  Length 46;
  Best Local Similarity   73.9%;  Pred. No. 5.8e+04;
  Matches   34;  Conservative    0;  Mismatches   12;  Indels    0;  Gaps    0;

Qy     24 AGCGAGCGGGCGAGCCGGAGCGAGGAAGGGAAAGCGCAAGAGAGAG 69
          || ||| ||| |||| |||| | || || || || |  ||||||||
Db      1 AGAGAGAGGGAGAGCGGGAGAGCGGGAGAGAGAGAGAGAGAGAG 46


RESULT 25
AAF60024
ID   AAF60024 standard; DNA; 45 BP.
XX
AC   AAF60024;
XX
DT   26-APR-2001  (first entry)
XX
DE   DNA linker.
XX
KW   Antibody; sperm; S19; contraception; ss.
XX
OS   Synthetic.
XX
PN   WO200107083-A1.
XX
PD   01-FEB-2001.
XX
PF   21-JUL-2000; 2000WO-US19843.
XX
PR   23-JUL-1999;   99US-0145512.
XX
PA   (UYVI-) UNIV VIRGINIA PATENT FOUND.
XX
PI   Herr JC,  Norton EJ,  Diekman AB;
XX
DR   WPI; 2001-182730/18.
```

XX
PT New recombinant antibody derivative of monoclonal antibody S19, useful
PT as a reagent for purifying or detecting human spermatozoa, as an active
PT ingredient of a spermistatic agent, or as a component of a spermicidal
PT contraceptive -
XX
PS Disclosure; Page 43; 48pp; English.
XX
CC The present invention relates to a recombinant antibody capable of
CC specifically binding to sperm agglutination antigen-1 (SAGA-1).
CC The recombinant antibody has two peptide fragments of the S19
CC antibody and the fragments are joined together by a linker.
CC The recombinant monoclonal antibodies are useful in a passive
CC immunity composition for contraception as they inhibit the ability of
CC sperm to fertilize an egg. The antibodies may be used e.g. as an
CC active ingredient of a spermistatic agent, or as a component of a
CC spermicidal contraceptive.
XX
SQ Sequence 45 BP; 2 A; 10 C; 27 G; 6 T; 0 other;

Query Match 1.7%; Score 26.4; DB 22; Length 45;
Best Local Similarity 75.0%; Pred. No. 6.8e+04;
Matches 33; Conservative 0; Mismatches 11; Indels 0; Gaps 0;

```
Qy    1341 GCGGCGGGGACAGCGGCGGCGGGGACCGCGGGGGCGGCGGCGGC 1384
           ||||||| | |||||| || || |     ||||||||||| ||
Db       2 GCGGCGGCGGCAGCGGTGGTGGTGGTTCTGGGGGCGGCGGCAGC 45
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Search completed: March 13, 2003, 21:59:12
Job time : 426 secs

GenCore version 5.1.4_p5_4578

OM nucleic - nucleic search, using sw model

Run on: March 13, 2003, 21:52:28 ; Search time 72 Seconds
(without alignments)
6712.814 Million cell updates/sec

Title: US-10-001-844-3
Perfect score: 1576
Sequence: 1 gcgaggcagccagcgaggga.....gaggggcgcgggaggggcc 1576

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 441362 seqs, 153338381 residues

Total number of hits satisfying chosen parameters: 609818

Minimum DB seq length: 0
Maximum DB seq length: 50

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 1000 summaries

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6: /cgn2_6/ptodata/1/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Result No.	Score	% Query Match	Length	DB	ID	Description
c	1	36	2.3	49	4	US-09-325-256-31	Sequence 31, Appl
	2	28.2	1.8	50	4	US-09-930-181-14	Sequence 14, Appl
	3	26	1.6	50	4	US-09-580-923-35	Sequence 35, Appl
	4	25	1.6	33	1	US-08-068-747-7	Sequence 7, Appli
	5	24.6	1.6	50	3	US-08-846-020A-6	Sequence 6, Appli
	6	24.6	1.6	50	4	US-09-617-871-6	Sequence 6, Appli
	7	24	1.5	24	1	US-08-748-591-11	Sequence 11, Appl
	8	24	1.5	24	2	US-08-356-060A-43	Sequence 43, Appl
	9	24	1.5	24	4	US-08-460-900C-43	Sequence 43, Appl
	10	24	1.5	24	4	US-08-674-509B-43	Sequence 43, Appl
	11	24	1.5	24	4	US-08-954-698-43	Sequence 43, Appl
	12	24	1.5	24	4	US-08-957-874-43	Sequence 43, Appl
	13	24	1.5	45	1	US-08-258-026A-13	Sequence 13, Appl
	14	24	1.5	45	4	US-09-813-781-129	Sequence 129, App
	15	24	1.5	45	5	PCT-US95-07541-13	Sequence 13, Appl
c	16	23.6	1.5	30	1	US-08-068-747-2	Sequence 2, Appli
	17	23.6	1.5	38	4	US-09-499-884-12	Sequence 12, Appl
	18	23.6	1.5	48	4	US-09-497-933A-19	Sequence 19, Appl
	19	23.6	1.5	50	4	US-09-930-181-13	Sequence 13, Appl
c	20	23.4	1.5	25	1	US-08-748-591-12	Sequence 12, Appl
c	21	22.4	1.4	32	4	US-09-083-123-5	Sequence 5, Appli
	22	22	1.4	47	4	US-09-325-256-30	Sequence 30, Appl
	23	21.8	1.4	35	1	US-08-340-045-7	Sequence 7, Appli
	24	21.8	1.4	35	3	US-08-871-302A-7	Sequence 7, Appli
	25	21.6	1.4	40	4	US-09-485-737B-5	Sequence 5, Appli
c	26	21.4	1.4	31	4	US-09-083-123-4	Sequence 4, Appli
	27	21.4	1.4	50	4	US-09-165-264-4	Sequence 4, Appli
	28	21.2	1.3	49	4	US-09-183-866-7	Sequence 7, Appli
	29	21	1.3	47	4	US-09-641-638-935	Sequence 935, App
	30	21	1.3	47	4	US-09-641-638-1096	Sequence 1096, Ap
c	31	21	1.3	50	1	US-08-171-389-374	Sequence 374, App
c	32	21	1.3	50	1	US-08-123-936-374	Sequence 374, App
c	33	21	1.3	50	2	US-08-475-228A-374	Sequence 374, App
c	34	21	1.3	50	3	US-08-482-080A-374	Sequence 374, App
c	35	21	1.3	50	4	US-09-354-947-374	Sequence 374, App
c	36	21	1.3	50	5	PCT-US93-12388-374	Sequence 374, App
	37	20.8	1.3	47	4	US-09-641-638-934	Sequence 934, App
c	38	20.8	1.3	48	3	US-08-478-097A-33	Sequence 33, Appl
	39	20.8	1.3	49	4	US-09-538-709-1159	Sequence 1159, Ap
c	40	20.6	1.3	45	1	US-07-885-689A-2	Sequence 2, Appli
	41	20.6	1.3	45	4	US-08-487-761-1	Sequence 1, Appli
c	42	20.6	1.3	45	4	US-09-497-933A-22	Sequence 22, Appl
	43	20.6	1.3	48	2	US-08-750-128-2	Sequence 2, Appli
c	44	20.4	1.3	30	4	US-09-083-123-2	Sequence 2, Appli
	45	20.4	1.3	30	4	US-09-083-123-8	Sequence 8, Appli
c	46	20.4	1.3	40	4	US-09-677-045-10	Sequence 10, Appl
	47	20.4	1.3	41	3	US-08-930-589A-14	Sequence 14, Appl
	48	20.4	1.3	41	4	US-09-599-781-14	Sequence 14, Appl
	49	20.4	1.3	44	3	US-08-846-020A-5	Sequence 5, Appli
	50	20.4	1.3	44	4	US-09-617-871-5	Sequence 5, Appli
c	51	20.4	1.3	47	5	PCT-US95-04439-7	Sequence 7, Appli
c	52	20.4	1.3	49	4	US-09-538-709-1141	Sequence 1141, Ap
	53	20.4	1.3	50	4	US-09-165-264-3	Sequence 3, Appli
	54	20.2	1.3	42	4	US-09-162-484-7	Sequence 7, Appli
	55	20.2	1.3	46	1	US-08-171-389-85	Sequence 85, Appl
	56	20.2	1.3	46	1	US-08-123-936-85	Sequence 85, Appl
	57	20.2	1.3	46	2	US-08-475-228A-85	Sequence 85, Appl
	58	20.2	1.3	46	3	US-08-482-080A-85	Sequence 85, Appl
	59	20.2	1.3	46	4	US-09-354-947-85	Sequence 85, Appl
	60	20.2	1.3	46	5	PCT-US93-12388-85	Sequence 85, Appl
c	61	20.2	1.3	47	2	US-08-975-902-48	Sequence 48, Appl
c	62	20.2	1.3	47	3	US-09-251-565-48	Sequence 48, Appl
	63	20.2	1.3	48	4	US-09-198-956-26	Sequence 26, Appl
	64	20.2	1.3	48	4	US-09-198-955A-32	Sequence 32, Appl
	65	20.2	1.3	48	4	US-09-694-531-32	Sequence 32, Appl
	66	20.2	1.3	48	4	US-09-670-141-26	Sequence 26, Appl
c	67	20	1.3	42	3	US-08-448-619-4	Sequence 4, Appli
c	68	20	1.3	42	4	US-09-162-484-7	Sequence 7, Appli
	69	20	1.3	45	1	US-08-167-939A-14	Sequence 14, Appl
	70	20	1.3	45	1	US-08-567-538-14	Sequence 14, Appl
	71	20	1.3	45	4	US-09-561-490E-35	Sequence 35, Appl
c	72	20	1.3	50	1	US-08-672-571A-13	Sequence 13, Appl
c	73	19.6	1.2	42	4	US-08-933-219B-20	Sequence 20, Appl
c	74	19.6	1.2	42	4	US-09-321-481-20	Sequence 20, Appl
	75	19.6	1.2	50	1	US-07-972-032-75	Sequence 75, Appl
c	76	19.4	1.2	33	1	US-07-723-002C-13	Sequence 13, Appl
	77	19.4	1.2	39	4	US-09-325-256-27	Sequence 27, Appl
	78	19.4	1.2	42	4	US-09-325-256-29	Sequence 29, Appl
	79	19.4	1.2	43	4	US-09-042-353-395	Sequence 395, App
	80	19.4	1.2	43	4	US-08-758-417A-245	Sequence 245, App
	81	19.4	1.2	45	3	US-08-718-904-50	Sequence 50, Appl
	82	19.4	1.2	45	5	PCT-US95-10973A-43	Sequence 43, Appl
	83	19.4	1.2	46	4	US-09-390-867A-49	Sequence 49, Appl
	84	19.4	1.2	46	4	US-09-548-260-49	Sequence 49, Appl
	85	19.2	1.2	36	4	US-08-026-143B-28	Sequence 28, Appl
	86	19.2	1.2	36	5	PCT-US92-10621-28	Sequence 28, Appl
	87	19.2	1.2	36	5	PCT-US94-02233-28	Sequence 28, Appl
c	88	19.2	1.2	42	1	US-07-803-633A-8	Sequence 8, Appli
c	89	19.2	1.2	42	2	US-08-525-742-18	Sequence 18, Appl
	90	19.2	1.2	44	1	US-08-222-177A-385	Sequence 385, App
c	91	19.2	1.2	45	1	US-08-258-026A-14	Sequence 14, Appl
c	92	19.2	1.2	45	5	PCT-US95-07541-14	Sequence 14, Appl
	93	19.2	1.2	46	4	US-08-795-876-8	Sequence 8, Appli
c	94	19.2	1.2	47	2	US-08-406-855A-10	Sequence 10, Appl
c	95	19.2	1.2	47	3	US-09-206-899-10	Sequence 10, Appl
c	96	19.2	1.2	47	4	US-09-688-415-15	Sequence 15, Appl
	97	19.2	1.2	48	1	US-08-229-284A-11	Sequence 11, Appl
c	98	19.2	1.2	48	1	US-08-023-757-5	Sequence 5, Appli
c	99	19.2	1.2	48	1	US-08-177-502-5	Sequence 5, Appli
c	100	19.2	1.2	48	2	US-08-383-621-8	Sequence 8, Appli

c 101	19.2	1.2	48	3	US-08-459-906-8	Sequence 8, Appli
c 102	19.2	1.2	49	1	US-08-171-389-405	Sequence 405, App
c 103	19.2	1.2	49	1	US-08-123-936-405	Sequence 405, App
c 104	19.2	1.2	49	2	US-08-475-228A-405	Sequence 405, App
c 105	19.2	1.2	49	3	US-08-482-080A-405	Sequence 405, App
c 106	19.2	1.2	49	4	US-09-354-947-405	Sequence 405, App
c 107	19.2	1.2	49	5	PCT-US93-12388-405	Sequence 405, App
108	19.2	1.2	50	1	US-08-644-729-12	Sequence 12, Appl
c 109	19	1.2	19	1	US-08-748-591-16	Sequence 16, Appl
c 110	19	1.2	19	1	US-08-748-591-21	Sequence 21, Appl
111	19	1.2	19	4	US-09-102-491-5	Sequence 5, Appli
112	19	1.2	19	4	US-09-102-491-9	Sequence 9, Appli
c 113	19	1.2	30	4	US-09-813-781-11	Sequence 11, Appl
c 114	19	1.2	30	4	US-09-813-781-13	Sequence 13, Appl
c 115	19	1.2	36	4	US-09-301-199A-2	Sequence 2, Appli
116	19	1.2	39	4	US-09-450-072-8	Sequence 8, Appli
117	19	1.2	39	4	US-09-351-348-8	Sequence 8, Appli
c 118	19	1.2	41	4	US-08-646-265A-105	Sequence 105, App
c 119	19	1.2	41	4	US-08-327-874A-32	Sequence 32, Appl
c 120	19	1.2	41	5	PCT-US94-09700-32	Sequence 32, Appl
121	19	1.2	45	2	US-08-436-664-13	Sequence 13, Appl
c 122	19	1.2	45	2	US-08-436-664-14	Sequence 14, Appl
123	19	1.2	45	3	US-09-135-642-13	Sequence 13, Appl
c 124	19	1.2	45	3	US-09-135-642-14	Sequence 14, Appl
125	19	1.2	45	3	US-08-394-232A-13	Sequence 13, Appl
c 126	19	1.2	45	3	US-08-394-232A-14	Sequence 14, Appl
c 127	19	1.2	45	4	US-09-813-781-7	Sequence 7, Appli
128	19	1.2	45	5	PCT-US95-04080-13	Sequence 13, Appl
c 129	19	1.2	45	5	PCT-US95-04080-14	Sequence 14, Appl
130	19	1.2	46	2	US-08-448-418-10	Sequence 10, Appl
c 131	18.8	1.2	39	4	US-09-450-072-8	Sequence 8, Appli
c 132	18.8	1.2	39	4	US-09-351-348-8	Sequence 8, Appli
133	18.8	1.2	40	2	US-08-790-963-75	Sequence 75, Appl
134	18.8	1.2	40	4	US-09-371-774-75	Sequence 75, Appl
135	18.8	1.2	44	2	US-08-403-852D-35	Sequence 35, Appl
136	18.8	1.2	44	3	US-08-510-646B-37	Sequence 37, Appl
137	18.8	1.2	44	4	US-09-231-818-35	Sequence 35, Appl
c 138	18.8	1.2	47	2	US-08-790-963-56	Sequence 56, Appl
c 139	18.8	1.2	47	4	US-09-371-774-56	Sequence 56, Appl
140	18.8	1.2	48	1	US-08-629-600-2	Sequence 2, Appli
141	18.8	1.2	48	4	US-09-076-761-2	Sequence 2, Appli
142	18.8	1.2	48	4	US-09-538-709-82	Sequence 82, Appl
143	18.8	1.2	48	4	US-09-538-709-1249	Sequence 1249, Ap
144	18.8	1.2	49	4	US-09-538-709-989	Sequence 989, App
145	18.8	1.2	49	4	US-09-538-709-1010	Sequence 1010, Ap
146	18.8	1.2	49	4	US-09-538-709-1158	Sequence 1158, Ap
c 147	18.8	1.2	50	4	US-09-455-679-17	Sequence 17, Appl
148	18.6	1.2	25	1	US-08-374-144-3	Sequence 3, Appli
149	18.6	1.2	25	1	US-08-775-164-3	Sequence 3, Appli
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152	18.6	1.2	25	5	PCT-US93-06828-3	Sequence 3, Appli
153	18.6	1.2	44	2	US-08-595-043A-45	Sequence 45, Appl
154	18.6	1.2	45	3	US-08-444-818-249	Sequence 249, App
155	18.6	1.2	45	4	US-09-561-490E-37	Sequence 37, Appl
c 156	18.6	1.2	46	2	US-08-263-911-19	Sequence 19, Appl
157	18.6	1.2	47	4	US-09-641-638-968	Sequence 968, App
158	18.6	1.2	48	2	US-08-750-128-8	Sequence 8, Appli
c 159	18.6	1.2	49	1	US-07-972-032-74	Sequence 74, Appl
c 160	18.6	1.2	49	1	US-08-642-255-87	Sequence 87, Appl
c 161	18.6	1.2	49	4	US-09-538-709-112	Sequence 112, App
162	18.6	1.2	49	4	US-09-538-709-1009	Sequence 1009, Ap
c 163	18.6	1.2	49	4	US-09-538-709-1279	Sequence 1279, Ap
c 164	18.6	1.2	50	1	US-08-171-389-463	Sequence 463, App
c 165	18.6	1.2	50	1	US-08-123-936-463	Sequence 463, App
c 166	18.6	1.2	50	2	US-08-475-228A-463	Sequence 463, App
c 167	18.6	1.2	50	3	US-08-482-080A-463	Sequence 463, App
c 168	18.6	1.2	50	4	US-08-785-668-23	Sequence 23, Appl
c 169	18.6	1.2	50	4	US-09-354-947-463	Sequence 463, App
c 170	18.6	1.2	50	5	PCT-US93-12388-463	Sequence 463, App
c 171	18.4	1.2	43	2	US-08-465-473B-27	Sequence 27, Appl
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183	18.4	1.2	49	1	US-08-123-936-405	Sequence 405, App
184	18.4	1.2	49	2	US-08-475-228A-405	Sequence 405, App
185	18.4	1.2	49	3	US-08-482-080A-405	Sequence 405, App
186	18.4	1.2	49	4	US-09-354-947-405	Sequence 405, App
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c 188	18.4	1.2	49	4	US-09-538-709-1153	Sequence 1153, Ap
189	18.4	1.2	49	5	PCT-US93-12388-405	Sequence 405, App
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191	18.4	1.2	50	1	US-08-171-389-481	Sequence 481, App
c 192	18.4	1.2	50	1	US-08-123-936-126	Sequence 126, App
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197	18.4	1.2	50	3	US-08-482-080A-481	Sequence 481, App
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203	18.2	1.2	24	5	PCT-US96-01473-6	Sequence 6, Appli
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221	18.2	1.2	46	3	US-08-482-080A-184	Sequence 184, App
222	18.2	1.2	46	4	US-09-354-947-184	Sequence 184, App
223	18.2	1.2	46	5	PCT-US93-12388-184	Sequence 184, App
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234	18.2	1.2	49	4	US-09-538-709-1060	Sequence 1060, Ap
235	18.2	1.2	50	1	US-08-171-389-331	Sequence 331, App
236	18.2	1.2	50	1	US-08-123-936-331	Sequence 331, App
237	18.2	1.2	50	2	US-08-475-228A-331	Sequence 331, App
238	18.2	1.2	50	3	US-08-482-080A-331	Sequence 331, App
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245	18	1.1	35	3	US-09-078-166-4	Sequence 4, Appli
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	282	18	1.1	50	1	US-08-123-936-374
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	330	17.6	1.1	34	1	US-08-479-723A-22
	331	17.6	1.1	34	5	PCT-US94-04310-22
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	336	17.6	1.1	36	5	PCT-US94-09700-28
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	339	17.6	1.1	41	1	US-08-123-936-243
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	352	17.6	1.1	44	5	PCT-US93-12388-63
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	357	17.6	1.1	45	2	US-08-860-882A-7
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	394	17.6	1.1	50	4	US-09-333-820-17
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	396	17.6	1.1	50	4	US-09-354-947-524
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	398	17.6	1.1	50	4	US-09-005-167A-78
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	400	17.6	1.1	50	4	US-09-097-239-39
	401	17.6	1.1	50	4	US-09-176-741B-78
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	408	17.4	1.1	27	1	US-08-208-486-81
	409	17.4	1.1	28	3	US-08-846-020A-2
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	411	17.4	1.1	33	6	5256770-5
	412	17.4	1.1	35	1	US-08-468-220-8
	413	17.4	1.1	35	2	US-08-468-698-8
	414	17.4	1.1	35	4	US-08-194-664A-8
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	420	17.4	1.1	38	4	US-09-127-902-12
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	422	17.4	1.1	38	5	PCT-US95-09641-12
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	424	17.4	1.1	42	3	US-08-889-502-35
c	425	17.4	1.1	42	4	US-09-280-909A-28
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	427	17.4	1.1	44	1	US-08-171-389-152
	428	17.4	1.1	44	1	US-08-123-936-152
	429	17.4	1.1	44	2	US-08-475-228A-152
	430	17.4	1.1	44	3	US-08-482-080A-152
	431	17.4	1.1	44	4	US-09-354-947-152
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	433	17.4	1.1	45	1	US-07-885-689A-2
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	455	17.4	1.1	49	1	US-08-261-660A-27
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	482	17.2	1.1	41	1	US-08-086-631-22
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	484	17.2	1.1	41	5	PCT-US93-08174-22
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	486	17.2	1.1	42	3	US-08-827-974-1
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c	491	17.2	1.1	42	4	US-08-260-174-9
	492	17.2	1.1	42	4	US-08-910-722-5
c	493	17.2	1.1	42	4	US-09-338-128A-9
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c	501	17.2	1.1	45	4	US-08-487-761-1
	502	17.2	1.1	45	4	US-09-517-871-15
	503	17.2	1.1	45	5	PCT-US94-14106-15
	504	17.2	1.1	46	1	US-08-171-389-183
	505	17.2	1.1	46	1	US-08-123-936-183
	506	17.2	1.1	46	2	US-08-475-228A-183
	507	17.2	1.1	46	3	US-08-482-080A-183
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	509	17.2	1.1	46	5	PCT-US93-12388-183
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c	528	17.2	1.1	50	1	US-08-123-936-112
c	529	17.2	1.1	50	1	US-08-123-936-331
c	530	17.2	1.1	50	2	US-08-475-228A-112
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c	535	17.2	1.1	50	4	US-09-354-947-112
c	536	17.2	1.1	50	4	US-09-354-947-331
c	537	17.2	1.1	50	5	PCT-US93-12388-112
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	542	17	1.1	33	3	US-08-873-709-12
c	543	17	1.1	33	3	US-08-930-589A-15
	544	17	1.1	33	4	US-09-437-034B-7
	545	17	1.1	33	4	US-09-255-464B-8
c	546	17	1.1	33	4	US-09-599-781-15
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	548	17	1.1	35	3	US-08-463-903-40
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	554	17	1.1	37	4	US-07-875-790B-10
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c	556	17	1.1	37	4	US-09-255-464B-7
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c	567	17	1.1	38	4	US-09-338-128A-19
c	568	17	1.1	38	4	US-09-232-346-19
c	569	17	1.1	38	4	US-09-037-192-19
	570	17	1.1	39	4	US-08-556-978B-64
c	571	17	1.1	39	4	US-08-556-978B-65
	572	17	1.1	40	2	US-08-425-684-128
	573	17	1.1	40	2	US-08-675-502-128
c	574	17	1.1	40	4	US-09-546-483-1
c	575	17	1.1	40	4	US-09-823-177-1
	576	17	1.1	41	1	US-08-481-003-9
	577	17	1.1	41	3	US-08-485-598-9
c	578	17	1.1	42	1	US-08-468-036-30
c	579	17	1.1	42	2	US-08-376-843-30
	580	17	1.1	42	4	US-09-459-958-12
c	581	17	1.1	43	4	US-09-387-300-35
c	582	17	1.1	45	1	US-08-481-003-8
c	583	17	1.1	45	3	US-08-997-918-22
c	584	17	1.1	45	3	US-08-485-598-8
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	590	17	1.1	46	2	US-08-475-228A-175
	591	17	1.1	46	2	US-07-916-098A-60
	592	17	1.1	46	3	US-08-482-080A-175
	593	17	1.1	46	4	US-09-354-947-175
	594	17	1.1	46	5	PCT-US93-12388-175
c	595	17	1.1	47	4	US-09-641-638-1190
	596	17	1.1	48	4	US-08-828-533-37
	597	17	1.1	49	1	US-07-994-469A-26
	598	17	1.1	49	4	US-09-538-709-929
	599	17	1.1	49	4	US-09-538-709-940
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c	617	17	1.1	50	4	US-09-538-709-1077
c	618	17	1.1	50	5	PCT-US93-12388-364
c	619	17	1.1	50	5	PCT-US93-12388-497
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c	621	16.8	1.1	29	3	US-09-082-969-17
c	622	16.8	1.1	30	1	US-08-318-193-64
c	623	16.8	1.1	30	1	US-08-543-630-1
	624	16.8	1.1	30	2	US-08-888-366-28
c	625	16.8	1.1	30	4	US-08-460-900C-49
c	626	16.8	1.1	30	4	US-08-674-509B-19
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	628	16.8	1.1	30	4	US-08-589-109A-13
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c	632	16.8	1.1	33	1	US-08-436-717-76
c	633	16.8	1.1	33	4	US-08-753-247-3
c	634	16.8	1.1	35	3	US-08-685-871-15
c	635	16.8	1.1	35	3	US-08-685-871-20
c	636	16.8	1.1	35	3	US-08-685-871-24
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c	638	16.8	1.1	35	3	US-08-685-871-34
c	639	16.8	1.1	35	3	US-08-685-871-36
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c	641	16.8	1.1	35	3	US-08-685-871-46
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	643	16.8	1.1	36	1	US-08-455-627-7
	644	16.8	1.1	36	1	US-08-435-350-3
	645	16.8	1.1	36	2	US-08-689-856-7
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	647	16.8	1.1	37	1	US-08-428-733A-10
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	650	16.8	1.1	40	1	US-08-390-878-3
	651	16.8	1.1	40	2	US-08-850-049-126
	652	16.8	1.1	40	2	US-08-050-478-126
	653	16.8	1.1	40	4	US-09-414-117-126
	654	16.8	1.1	40	4	US-09-678-437-126
	655	16.8	1.1	41	2	US-08-373-190-57
	656	16.8	1.1	41	2	US-08-438-190A-57
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	659	16.8	1.1	41	4	US-09-556-111-57
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c	663	16.8	1.1	42	4	US-09-231-303-6
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c	665	16.8	1.1	43	1	US-07-714-131C-263
c	666	16.8	1.1	43	1	US-08-412-110-263
c	667	16.8	1.1	43	1	US-08-409-442A-263
c	668	16.8	1.1	43	2	US-08-469-609A-263
c	669	16.8	1.1	43	3	US-08-726-807B-23
c	670	16.8	1.1	43	3	US-09-143-190-263
c	671	16.8	1.1	43	3	US-09-258-367-23
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c	673	16.8	1.1	43	4	US-09-431-414-23
c	674	16.8	1.1	43	4	US-09-225-670-23
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	680	16.8	1.1	44	3	US-09-219-849-23
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	682	16.8	1.1	45	1	US-08-171-389-84
	683	16.8	1.1	45	1	US-08-449-207-3
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687	16.8	1.1	45	2	US-08-475-228A-84	Sequence 84, Appl
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689	16.8	1.1	45	2	US-08-350-260A-548	Sequence 548, App
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691	16.8	1.1	45	3	US-08-482-080A-84	Sequence 84, Appl
692	16.8	1.1	45	3	US-08-997-918-23	Sequence 23, Appl
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695	16.8	1.1	45	4	US-09-354-947-84	Sequence 84, Appl
696	16.8	1.1	45	4	US-09-311-626B-56	Sequence 56, Appl
697	16.8	1.1	45	5	PCT-US93-12388-84	Sequence 84, Appl
698	16.8	1.1	45	5	PCT-US94-14106-13	Sequence 13, Appl
699	16.8	1.1	45	5	PCT-US94-14106-14	Sequence 14, Appl
700	16.8	1.1	45	5	PCT-US94-14106-16	Sequence 16, Appl
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702	16.8	1.1	46	4	US-09-198-603C-21	Sequence 21, Appl
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713	16.8	1.1	47	4	US-09-641-638-1184	Sequence 1184, Ap
714	16.8	1.1	47	4	US-09-641-638-1296	Sequence 1296, Ap
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721	16.8	1.1	48	3	US-08-360-144A-7	Sequence 7, Appli
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724	16.8	1.1	48	4	US-09-012-504A-7	Sequence 7, Appli
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729	16.8	1.1	49	4	US-09-538-709-1165	Sequence 1165, Ap
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c 731	16.8	1.1	50	1	US-08-171-389-504	Sequence 504, App
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735	16.8	1.1	50	2	US-08-472-576B-21	Sequence 21, Appl
736	16.8	1.1	50	2	US-08-428-734B-21	Sequence 21, Appl
c 737	16.8	1.1	50	2	US-08-475-228A-375	Sequence 375, App
c 738	16.8	1.1	50	2	US-08-475-228A-504	Sequence 504, App
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745	16.8	1.1	50	4	US-08-713-556F-21	Sequence 21, Appl
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c 748	16.8	1.1	50	4	US-09-354-947-504	Sequence 504, App
c 749	16.8	1.1	50	5	PCT-US93-12388-375	Sequence 375, App
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757	16.6	1.1	32	1	US-08-469-802B-28	Sequence 28, Appl
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c 762	16.6	1.1	33	4	US-08-974-549A-616	Sequence 616, App
763	16.6	1.1	33	4	US-09-527-236A-13	Sequence 13, Appl
764	16.6	1.1	33	4	US-09-480-142-5	Sequence 5, Appli
765	16.6	1.1	34	4	US-08-974-549A-482	Sequence 482, App
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768	16.6	1.1	36	5	PCT-US93-08479-7	Sequence 7, Appli
769	16.6	1.1	38	1	US-07-638-512-2	Sequence 2, Appli
770	16.6	1.1	38	4	US-09-042-353-326	Sequence 326, App
771	16.6	1.1	38	4	US-08-758-417A-174	Sequence 174, App
c 772	16.6	1.1	39	5	PCT-US93-05240-3	Sequence 3, Appli
773	16.6	1.1	39	6	5240848-9	Patent No. 5240848
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776	16.6	1.1	40	1	US-08-199-507B-15	Sequence 15, Appl
777	16.6	1.1	40	1	US-08-199-507B-27	Sequence 27, Appl
778	16.6	1.1	40	1	US-08-199-507B-30	Sequence 30, Appl
779	16.6	1.1	40	1	US-08-441-828-15	Sequence 15, Appl
780	16.6	1.1	40	1	US-08-441-828-27	Sequence 27, Appl
781	16.6	1.1	40	1	US-08-441-828-30	Sequence 30, Appl
782	16.6	1.1	41	3	US-09-167-354-4	Sequence 4, Appli
783	16.6	1.1	41	4	US-09-642-855-4	Sequence 4, Appli
784	16.6	1.1	41	4	US-09-642-514-4	Sequence 4, Appli
c 785	16.6	1.1	41	4	US-09-438-954-37	Sequence 37, Appl
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c 788	16.6	1.1	42	3	US-09-057-088-3	Sequence 3, Appli
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793	16.6	1.1	43	2	US-08-839-425-9	Sequence 9, Appli
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c 795	16.6	1.1	44	4	US-09-042-353-376	Sequence 376, App
c 796	16.6	1.1	44	4	US-08-758-417A-226	Sequence 226, App
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c 798	16.6	1.1	45	2	US-08-588-201-9	Sequence 9, Appli
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826	16.6	1.1	47	4	US-09-538-709-129	Sequence 129, App
827	16.6	1.1	47	4	US-09-538-709-1296	Sequence 1296, Ap
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	835	16.6	1.1	49	4	US-09-538-709-966 Sequence 966, App
	836	16.6	1.1	49	4	US-09-538-709-976 Sequence 976, App
	837	16.6	1.1	49	4	US-09-538-709-987 Sequence 987, App
c	838	16.6	1.1	49	4	US-09-538-709-987 Sequence 987, App
	839	16.6	1.1	49	4	US-09-538-709-1011 Sequence 1011, Ap
	840	16.6	1.1	49	4	US-09-538-709-1073 Sequence 1073, Ap
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	842	16.6	1.1	50	1	US-08-171-389-571 Sequence 571, App
c	843	16.6	1.1	50	1	US-08-123-936-495 Sequence 495, App
	844	16.6	1.1	50	1	US-08-123-936-571 Sequence 571, App
	845	16.6	1.1	50	1	US-08-416-756A-9 Sequence 9, Appli
c	846	16.6	1.1	50	2	US-08-475-228A-495 Sequence 495, App
	847	16.6	1.1	50	2	US-08-475-228A-571 Sequence 571, App
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	850	16.6	1.1	50	3	US-08-482-080A-571 Sequence 571, App
c	851	16.6	1.1	50	3	US-08-892-873-18 Sequence 18, Appl
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	855	16.6	1.1	50	4	US-09-025-769B-345 Sequence 345, App
c	856	16.6	1.1	50	4	US-09-025-769B-346 Sequence 346, App
	857	16.6	1.1	50	4	US-09-025-769B-347 Sequence 347, App
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	861	16.6	1.1	50	4	US-09-660-552-1 Sequence 1, Appli
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c	864	16.6	1.1	50	4	US-09-617-871-6 Sequence 6, Appli
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	866	16.6	1.1	50	4	US-09-354-947-571 Sequence 571, App
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	870	16.6	1.1	50	5	PCT-US93-12388-571 Sequence 571, App
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c	872	16.4	1.0	18	4	US-09-669-974-23 Sequence 23, Appl
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	874	16.4	1.0	26	1	US-08-487-141B-43 Sequence 43, Appl
	875	16.4	1.0	26	2	US-08-927-561-43 Sequence 43, Appl
	876	16.4	1.0	26	4	US-09-429-349-9 Sequence 9, Appli
	877	16.4	1.0	26	5	PCT-US96-09388-43 Sequence 43, Appl
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	879	16.4	1.0	27	1	US-08-758-306-204 Sequence 204, App
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	882	16.4	1.0	27	4	US-08-584-040-5100 Sequence 5100, Ap
c	883	16.4	1.0	28	1	US-08-333-565-34 Sequence 34, Appl
c	884	16.4	1.0	28	2	US-08-661-479-34 Sequence 34, Appl
	885	16.4	1.0	28	3	US-08-863-813A-38 Sequence 38, Appl
c	886	16.4	1.0	28	4	US-08-676-318A-38 Sequence 38, Appl
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c	888	16.4	1.0	30	4	US-09-281-481A-4 Sequence 4, Appli
	889	16.4	1.0	30	6	5520913-28 Patent No. 5520913
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	891	16.4	1.0	33	1	US-08-258-026A-9 Sequence 9, Appli
	892	16.4	1.0	33	4	US-09-605-785-488 Sequence 488, App
	893	16.4	1.0	33	4	US-09-439-313-488 Sequence 488, App
	894	16.4	1.0	33	5	PCT-US95-07541-9 Sequence 9, Appli
c	895	16.4	1.0	34	3	US-09-282-996-11 Sequence 11, Appl
	896	16.4	1.0	35	4	US-09-708-426-6 Sequence 6, Appli
c	897	16.4	1.0	35	5	PCT-US95-06987-3 Sequence 3, Appli
	898	16.4	1.0	36	1	US-08-311-760A-157 Sequence 157, App
	899	16.4	1.0	36	1	US-08-480-449-13 Sequence 13, Appl
c	900	16.4	1.0	36	1	US-08-608-437-1 Sequence 1, Appli
	901	16.4	1.0	36	1	US-08-608-437-2 Sequence 2, Appli
c	902	16.4	1.0	36	2	US-08-452-724A-10 Sequence 10, Appl
	903	16.4	1.0	36	2	US-08-585-684B-585 Sequence 585, App
	904	16.4	1.0	36	2	US-08-774-310-157 Sequence 157, App
	905	16.4	1.0	36	2	US-08-660-542-13 Sequence 13, Appl
	906	16.4	1.0	36	4	US-09-038-073-585 Sequence 585, App
	907	16.4	1.0	36	4	US-08-479-603-13 Sequence 13, Appl
	908	16.4	1.0	37	2	US-07-814-220-29 Sequence 29, Appl
	909	16.4	1.0	37	2	US-07-812-421-29 Sequence 29, Appl
	910	16.4	1.0	38	1	US-08-373-124A-685 Sequence 685, App
	911	16.4	1.0	38	1	US-08-373-124A-2360 Sequence 2360, Ap
c	912	16.4	1.0	38	1	US-08-530-492-17 Sequence 17, Appl
	913	16.4	1.0	38	1	US-08-435-628-685 Sequence 685, App
	914	16.4	1.0	38	1	US-08-435-628-2360 Sequence 2360, Ap
	915	16.4	1.0	38	2	US-08-731-272A-7 Sequence 7, Appli
c	916	16.4	1.0	38	4	US-08-906-517-17 Sequence 17, Appl
c	917	16.4	1.0	39	2	US-08-647-449-28 Sequence 28, Appl
	918	16.4	1.0	39	2	US-08-761-277A-62 Sequence 62, Appl
c	919	16.4	1.0	39	4	US-09-281-792B-28 Sequence 28, Appl
	920	16.4	1.0	40	1	US-07-949-488A-6 Sequence 6, Appli
c	921	16.4	1.0	40	1	US-08-030-731A-25 Sequence 25, Appl
c	922	16.4	1.0	40	4	US-09-476-256-27 Sequence 27, Appl
c	923	16.4	1.0	41	2	US-07-814-220-28 Sequence 28, Appl
c	924	16.4	1.0	41	2	US-07-812-421-28 Sequence 28, Appl
c	925	16.4	1.0	41	4	US-09-402-631A-1 Sequence 1, Appli
	926	16.4	1.0	42	1	US-08-464-136-75 Sequence 75, Appl
	927	16.4	1.0	42	2	US-08-349-131-75 Sequence 75, Appl
	928	16.4	1.0	42	3	US-08-470-297A-75 Sequence 75, Appl
	929	16.4	1.0	42	4	US-09-641-638-887 Sequence 887, App
	930	16.4	1.0	42	5	PCT-US91-07149-75 Sequence 75, Appl
	931	16.4	1.0	43	1	US-08-406-635-1 Sequence 1, Appli
	932	16.4	1.0	43	1	US-08-406-635-4 Sequence 4, Appli
c	933	16.4	1.0	43	3	US-09-068-738A-14 Sequence 14, Appl
c	934	16.4	1.0	43	4	US-09-162-484-15 Sequence 15, Appl
c	935	16.4	1.0	43	4	US-09-025-769B-324 Sequence 324, App
	936	16.4	1.0	43	4	US-08-672-213-66 Sequence 66, Appl
	937	16.4	1.0	43	4	US-09-153-310-23 Sequence 23, Appl
	938	16.4	1.0	43	4	US-09-117-860-44 Sequence 44, Appl
c	939	16.4	1.0	43	4	US-09-117-860-46 Sequence 46, Appl
	940	16.4	1.0	43	4	US-09-410-903-74 Sequence 74, Appl
c	941	16.4	1.0	44	2	US-08-637-899-6 Sequence 6, Appli
c	942	16.4	1.0	44	2	US-08-982-232-4 Sequence 4, Appli
c	943	16.4	1.0	44	2	US-09-128-312-11 Sequence 11, Appl
c	944	16.4	1.0	44	4	US-09-370-683-11 Sequence 11, Appl
c	945	16.4	1.0	45	1	US-08-171-389-66 Sequence 66, Appl
c	946	16.4	1.0	45	1	US-08-123-936-66 Sequence 66, Appl
c	947	16.4	1.0	45	1	US-08-418-123A-1 Sequence 1, Appli
c	948	16.4	1.0	45	2	US-08-475-228A-66 Sequence 66, Appl
	949	16.4	1.0	45	2	US-08-982-232-16 Sequence 16, Appl
	950	16.4	1.0	45	2	US-08-860-174A-16 Sequence 16, Appl
c	951	16.4	1.0	45	3	US-08-482-080A-66 Sequence 66, Appl
	952	16.4	1.0	45	4	US-09-171-025-9 Sequence 9, Appli
c	953	16.4	1.0	45	4	US-09-354-947-66 Sequence 66, Appl
	954	16.4	1.0	45	4	US-09-561-490E-42 Sequence 42, Appl
c	955	16.4	1.0	45	5	PCT-US93-12388-66 Sequence 66, Appl
c	956	16.4	1.0	46	1	US-08-484-192-180 Sequence 180, App
	957	16.4	1.0	47	1	US-08-103-739B-3 Sequence 3, Appli
	958	16.4	1.0	47	1	US-08-474-404-3 Sequence 3, Appli
	959	16.4	1.0	47	2	US-08-790-963-54 Sequence 54, Appl
	960	16.4	1.0	47	2	US-08-485-845-3 Sequence 3, Appli
	961	16.4	1.0	47	2	US-08-482-714-3 Sequence 3, Appli
	962	16.4	1.0	47	3	US-09-068-738A-13 Sequence 13, Appl
	963	16.4	1.0	47	4	US-09-371-774-54 Sequence 54, Appl
	964	16.4	1.0	47	4	US-09-211-416-3 Sequence 3, Appli
	965	16.4	1.0	47	4	US-09-059-958-3 Sequence 3, Appli
	966	16.4	1.0	47	4	US-09-641-638-848 Sequence 848, App
c	967	16.4	1.0	47	4	US-09-641-638-1087 Sequence 1087, Ap
c	968	16.4	1.0	47	5	PCT-US93-08435-31 Sequence 31, Appl
c	969	16.4	1.0	47	6	5284931-23 Patent No. 5284931
	970	16.4	1.0	48	1	US-07-750-080A-1 Sequence 1, Appli
	971	16.4	1.0	48	3	US-08-338-579A-36 Sequence 36, Appl
	972	16.4	1.0	48	3	US-08-651-472-1 Sequence 1, Appli
	973	16.4	1.0	48	4	US-08-358-928-1 Sequence 1, Appli
	974	16.4	1.0	48	4	US-08-957-351-32 Sequence 32, Appl
c	975	16.4	1.0	48	4	US-09-500-123-3 Sequence 3, Appli
	976	16.4	1.0	48	5	PCT-US94-09851-36 Sequence 36, Appl

977	16.4	1.0	49	1	US-08-484-493-4	Sequence 4, Appli
978	16.4	1.0	49	1	US-08-484-494-4	Sequence 4, Appli
979	16.4	1.0	49	2	US-08-345-212-4	Sequence 4, Appli
980	16.4	1.0	49	3	US-09-184-658-55	Sequence 55, Appl
981	16.4	1.0	49	3	US-09-249-003-4	Sequence 4, Appli
c 982	16.4	1.0	50	1	US-08-171-389-422	Sequence 422, App
c 983	16.4	1.0	50	1	US-08-171-389-481	Sequence 481, App
c 984	16.4	1.0	50	1	US-08-123-936-422	Sequence 422, App
c 985	16.4	1.0	50	1	US-08-123-936-481	Sequence 481, App
986	16.4	1.0	50	2	US-08-765-512-2	Sequence 2, Appli
c 987	16.4	1.0	50	2	US-08-475-228A-422	Sequence 422, App
c 988	16.4	1.0	50	2	US-08-475-228A-481	Sequence 481, App
989	16.4	1.0	50	2	US-08-914-828-2	Sequence 2, Appli
c 990	16.4	1.0	50	3	US-08-482-080A-422	Sequence 422, App
c 991	16.4	1.0	50	3	US-08-482-080A-481	Sequence 481, App
992	16.4	1.0	50	3	US-08-907-392A-2	Sequence 2, Appli
993	16.4	1.0	50	3	US-08-892-747-10	Sequence 10, Appl
994	16.4	1.0	50	3	US-08-983-607-5	Sequence 5, Appli
995	16.4	1.0	50	3	US-08-983-607-42	Sequence 42, Appl
996	16.4	1.0	50	4	US-08-849-567A-60	Sequence 60, Appl
c 997	16.4	1.0	50	4	US-09-354-947-422	Sequence 422, App
c 998	16.4	1.0	50	4	US-09-354-947-481	Sequence 481, App
c 999	16.4	1.0	50	5	PCT-US93-12388-422	Sequence 422, App
c1000	16.4	1.0	50	5	PCT-US93-12388-481	Sequence 481, App

ALIGNMENTS

```
RESULT 1
US-09-325-256-31/c
; Sequence 31, Application US/09325256
; Patent No. 6444793
; GENERAL INFORMATION:
;  APPLICANT:  PEPINSKY, R. BLAKE
;  APPLICANT:  BAKER, DARREN P.
;  APPLICANT:  WEN, DINGYI
;  APPLICANT:  WILLIAMS, KEVIN P.
;  APPLICANT:  GARGER, ELLEN A.
;  APPLICANT:  TAYLOR, FREDERICK R.
;  APPLICANT:  GALDES, ALPHONSE
;  APPLICANT:  PORTER, JEFFREY
;  TITLE OF INVENTION:  HYDROPHOBICALLY-MODIFIED PROTEIN COMPOSITIONS AND
;  TITLE OF INVENTION:  METHODS
;  FILE REFERENCE:  BIV-067.01
;  CURRENT APPLICATION NUMBER: US/09/325,256
;  CURRENT FILING DATE:  1999-06-03
;  PRIOR APPLICATION NUMBER:  60/099,800
;  PRIOR FILING DATE:  1998-09-10
;  PRIOR APPLICATION NUMBER:  60/078,935
;  PRIOR FILING DATE:  1998-03-20
;  PRIOR APPLICATION NUMBER:  60/089,685
;  PRIOR FILING DATE:  1998-06-17
;  PRIOR APPLICATION NUMBER:  60/067,423
;  PRIOR FILING DATE:  1997-12-03
;  PRIOR APPLICATION NUMBER:  PCT/US98/25676
;  PRIOR FILING DATE:  1998-12-03
;  NUMBER OF SEQ ID NOS:  31
;  SOFTWARE:  PatentIn Ver. 2.1
; SEQ ID NO 31
;   LENGTH: 49
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence: Primer
US-09-325-256-31

  Query Match             2.3%;  Score 36;  DB 4;  Length 49;
  Best Local Similarity   88.6%;  Pred. No. 50;
  Matches   39;  Conservative    0;  Mismatches    5;  Indels    0;  Gaps    0;

Qy    703 GGTGAAAGCAGAGAACTCGGTGGCGGCCAAATCGGGAGGCTGCT 746
          ||||||||||||||||||||||   || ||||||||||||||| |
Db     49 GGTGAAAGCAGAGAACTCGGTGTGCGCAAAATCGGGAGGCTGAT 6


RESULT 2
US-09-930-181-14
; Sequence 14, Application US/09930181
; Patent No. 6455292
; GENERAL INFORMATION:
;  APPLICANT: OriGene Technologies
;  TITLE OF INVENTION: Full-Length Serine Protein Kinase in Brain and Pancreas
;  FILE REFERENCE: 16U 101 V1
;  CURRENT APPLICATION NUMBER: US/09/930,181
;  CURRENT FILING DATE:  2001-08-16
;  NUMBER OF SEQ ID NOS: 18
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 14
;   LENGTH: 50
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-930-181-14

  Query Match             1.8%;  Score 28.2;  DB 4;  Length 50;
  Best Local Similarity   73.5%;  Pred. No. 1.7e+03;
  Matches   36;  Conservative    0;  Mismatches   13;  Indels    0;  Gaps    0;

Qy   1336 GGACCGCGGCGGGGACAGCGGCGGCGGGGACCGCGGGGGCGGCGGCGGC 1384
          ||  || |||| || |  ||||||||| | | |||| ||||||||  ||
Db      1 GGCGCGGGGCGCGGGCCTCGGCGGCGGCGGCGGCGGCGGCGGAAGC 49


RESULT 3
US-09-580-923-35
; Sequence 35, Application US/09580923
; Patent No. 6319672
; GENERAL INFORMATION:
;  APPLICANT:  Crouzet, Joel
;  APPLICANT:  Scherman, Daniel
;  APPLICANT:  Wils, Pierre
;  APPLICANT:  Cameron, Beatrice
;  APPLICANT:  Blanche, Francis
;  TITLE OF INVENTION:  PURIFICATION OF A TRIPLE HELIX FORMATION WITH AN
;  TITLE OF INVENTION:  IMMOBILIZED OLIGONUCLEOTIDE
;  FILE REFERENCE:  03804.0138-01
;  CURRENT APPLICATION NUMBER: US/09/580,923
;  CURRENT FILING DATE:  2000-05-26
;  PRIOR APPLICATION NUMBER:  08/860,038
;  PRIOR FILING DATE:  1997-06-09
;  PRIOR APPLICATION NUMBER:  PCT/FR95/01468
;  PRIOR FILING DATE:  1995-11-08
;  NUMBER OF SEQ ID NOS:  36
;  SOFTWARE:  PatentIn Ver. 2.1
; SEQ ID NO 35
;   LENGTH: 50
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:
;   OTHER INFORMATION: oligonucleotide
US-09-580-923-35

  Query Match             1.6%;  Score 26;  DB 4;  Length 50;
  Best Local Similarity   70.0%;  Pred. No. 4.5e+03;
  Matches   35;  Conservative    0;  Mismatches   15;  Indels    0;  Gaps    0;

Qy     19 GAGAGAGCGAGCGGGCGAGCCGGAGCGAGGAAGGGAAAGCGCAAGAGAGA 68
          ||||||| ||| | | |||   ||| |||  || || || |  ||||||||
Db      1 GAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGA 50


RESULT 4
US-08-068-747-7
; Sequence 7, Application US/08068747
; Patent No. 5695933
```

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;  GENERAL INFORMATION:
;    APPLICANT:  Schalling, Martin
;    APPLICANT:  Hudson, Thomas J.
;    APPLICANT:  Housman, David E.
;    TITLE OF INVENTION:  Direct Determination of Expanded
;    TITLE OF INVENTION:  Nucleotide Repeats in the Human Genome
;    NUMBER OF SEQUENCES:  11
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Hamilton, Brook, Smith & Reynolds, P.C.
;      STREET:  Two Militia Drive
;      CITY:  Lexington
;      STATE:  Massachusett
;      COUNTRY:  USA
;      ZIP:  02173
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/068,747
;      FILING DATE:  28-MAY-1993
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Granahan, Patricia
;      REGISTRATION NUMBER:  32,227
;      REFERENCE/DOCKET NUMBER:  MIT-6141
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  617-861-6240
;      TELEFAX:  617-861-9540
;  INFORMATION FOR SEQ ID NO:  7:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  33 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  other nucleic acid
;      DESCRIPTION:  /desc = "Synthetic"
US-08-068-747-7

  Query Match             1.6%;  Score 25;  DB 1;  Length 33;
  Best Local Similarity   84.8%;  Pred. No. 6.6e+03;
  Matches   28;  Conservative    0;  Mismatches    5;  Indels    0;  Gaps    0;

Qy    1351 CAGCGGCGGCGGGGACCGCGGGGGCGGCGGCGG 1383
           | ||||||||||| | | |||| ||||||||||
Db       1 CGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 33


RESULT 5
US-08-846-020A-6
; Sequence 6, Application US/08846020A
; Patent No. 6090547
;  GENERAL INFORMATION:
;    APPLICANT:  Drazen M.D., Jeffrey M.
;    APPLICANT:  In M.D., Kwang-Ho
;    APPLICANT:  Asano M.D., Koichiro
;    APPLICANT:  Beier, David
;    APPLICANT:  Grobholz, James
;    TITLE OF INVENTION:  5-Lipoxygenase Gene Sequence
;    TITLE OF INVENTION:  Polymorphisms and Their Use in Classifying Patients
;    NUMBER OF SEQUENCES:  43
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  CHOATE, HALL & STEWART
;      STREET:  53 State Street
;      CITY:  Boston
;      STATE:  MA
;      COUNTRY:  USA
;      ZIP:  02109-2891
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/846,020A
;      FILING DATE:
;      CLASSIFICATION:  424
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Jarrell Ph.D., Brenda H.
;      REGISTRATION NUMBER:  39,223
;      REFERENCE/DOCKET NUMBER:  0092662-0012
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (617) 248-5000
;      TELEFAX:  (617) 248 4000
;  INFORMATION FOR SEQ ID NO:  6:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  50 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  both
;      TOPOLOGY:  not relevant
;    MOLECULE TYPE:  DNA (genomic)
;    IMMEDIATE SOURCE:
;      CLONE:  No. 6090547mal tandem SP1 binding motif with 6 base
;      CLONE:  pair deletion
US-08-846-020A-6

  Query Match             1.6%;  Score 24.6;  DB 3;  Length 50;
  Best Local Similarity   76.9%;  Pred. No. 8.3e+03;
  Matches   30;  Conservative    0;  Mismatches    9;  Indels    0;  Gaps    0;

Qy    1348 GGACAGCGGCGGCGGGGACCGCGGGGGCGGCGGCGGCAG 1386
           | || |||| ||||||| | | || || ||||| |||||
Db       6 GTACTGCGGGGGCGGGGGCGGGGGCGGGGGCGGGGGCAG 44


RESULT 6
US-09-617-871-6
; Sequence 6, Application US/09617871
; Patent No. 6355434
;  GENERAL INFORMATION:
;    APPLICANT:  Drazen M.D., Jeffrey M.
;    APPLICANT:  In M.D., Kwang-Ho
;    APPLICANT:  Asano M.D., Koichiro
;    APPLICANT:  Beier, David
;    APPLICANT:  Grobholz, James
;    TITLE OF INVENTION:  5-Lipoxygenase Gene Sequence
;    TITLE OF INVENTION:  Polymorphisms and Their Use in Classifying Patients
;    NUMBER OF SEQUENCES:  43
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  CHOATE, HALL & STEWART
;      STREET:  53 State Street
;      CITY:  Boston
;      STATE:  MA
;      COUNTRY:  USA
;      ZIP:  02109-2891
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/617,871
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/846,020
;      FILING DATE:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Jarrell Ph.D., Brenda H.
;      REGISTRATION NUMBER:  39,223
;      REFERENCE/DOCKET NUMBER:  0092662-0012
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (617) 248-5000
;      TELEFAX:  (617) 248 4000
;  INFORMATION FOR SEQ ID NO:  6:
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;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  50 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  both
;      TOPOLOGY:  not relevant
;    MOLECULE TYPE:  DNA (genomic)
;    IMMEDIATE SOURCE:
;      CLONE:  No. 6355434mal tandem SP1 binding motif with 6 base
;      CLONE:  pair deletion
US-09-617-871-6

  Query Match             1.6%;  Score 24.6;  DB 4;  Length 50;
  Best Local Similarity   76.9%;  Pred. No. 8.3e+03;
  Matches   30;  Conservative    0;  Mismatches    9;  Indels    0;  Gaps    0;

Qy   1348 GGACAGCGGCGGCGGGGACCGCGGGGGCGGCGGCGGCAG 1386
          | || |||| ||||||| | | || || ||||| |||||
Db      6 GTACTGCGGGGGCGGGGGCGGGGGCGGGGGCGGGGGCAG 44


RESULT 7
US-08-748-591-11
; Sequence 11, Application US/08748591
; Patent No. 5759811
;  GENERAL INFORMATION:
;    APPLICANT:  Epstein, Ervin
;    APPLICANT:  Hu, Zhilan
;    APPLICANT:  Bonifas, Jeanette
;    TITLE OF INVENTION:  Mutant Human Hedgehog Gene
;    NUMBER OF SEQUENCES:  23
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Fish and Richardson
;      STREET:  2200 Sand Hill Road
;      CITY:  Menlo Park
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  94025
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/748,591
;      FILING DATE:
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Sherwood, Pamela J
;      REGISTRATION NUMBER:  36,677
;      REFERENCE/DOCKET NUMBER:  06510/067001
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (415) 322-5070
;      TELEFAX:  (415) 854-0875
;  INFORMATION FOR SEQ ID NO:  11:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  24 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
US-08-748-591-11

  Query Match             1.5%;  Score 24;  DB 1;  Length 24;
  Best Local Similarity   100.0%;  Pred. No. 9.9e+03;
  Matches   24;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    524 ACCGAGGGCTGGGACGAAGATGGC 547
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Db      1 ACCGAGGGCTGGGACGAAGATGGC 24


RESULT 8
US-08-356-060A-43
; Sequence 43, Application US/08356060A
; Patent No. 5844079
;  GENERAL INFORMATION:
;    APPLICANT:  Ingham, Phillip W.
;    APPLICANT:  McMahon, Andrew P.
;    APPLICANT:  Tabin, Clifford J.
;    TITLE OF INVENTION:  Vertebrate Embryonic Pattern-Inducing
;    TITLE OF INVENTION:  Proteins and Uses Related Thereto
;    NUMBER OF SEQUENCES:  47
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  LAHIVE & COCKFIELD
;      STREET:  60 State Street
;      CITY:  Boston
;      STATE:  MA
;      COUNTRY:  USA
;      ZIP:  02109
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  ASCII(text)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/356,060A
;      FILING DATE:  14-DEC-1994
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/176,427
;      FILING DATE:  30-DEC-1993
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Vincent, Matthew P.
;      REGISTRATION NUMBER:  36,709
;      REFERENCE/DOCKET NUMBER:  HMI-006CP
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (617) 227-7400
;      TELEFAX:  (617) 227-5941
;  INFORMATION FOR SEQ ID NO:  43:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  24 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
US-08-356-060A-43

  Query Match             1.5%;  Score 24;  DB 2;  Length 24;
  Best Local Similarity   100.0%;  Pred. No. 9.9e+03;
  Matches   24;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    524 ACCGAGGGCTGGGACGAAGATGGC 547
          ||||||||||||||||||||||||
Db      1 ACCGAGGGCTGGGACGAAGATGGC 24


RESULT 9
US-08-460-900C-43
; Sequence 43, Application US/08460900C
; Patent No. 6165747
;  GENERAL INFORMATION:
;    APPLICANT:  Ingham, Phillip W.
;    APPLICANT:  McMahon, Andrew P.
;    APPLICANT:  Tabin, Clifford J.
;    APPLICANT:  Bumcrot, David A.
;    APPLICANT:  Marti-Gorostiza, Elisa
;    TITLE OF INVENTION:  Vertebrate Embryonic Pattern-Inducing
;    TITLE OF INVENTION:  Proteins and Uses Related Thereto
;    NUMBER OF SEQUENCES:  62
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  FOLEY, HOAG & ELIOT LLP
;      STREET:  One Post Office Square
;      CITY:  Boston
;      STATE:  MA
;      COUNTRY:  USA
;      ZIP:  02109
```

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;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  Floppy disk
;       COMPUTER:  IBM PC compatible
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  PatentIn Release #1.0, Version #1.30
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/08/460,900C
;       FILING DATE:  5-JUNE-1995
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  US 08/435,093
;       FILING DATE:  4-MAY-1995
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  US 08/356,060
;       FILING DATE:  14-DEC-1994
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  US 08/176,427
;       FILING DATE:  30-DEC-1993
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  Vincent, Matthew P.
;       REGISTRATION NUMBER:  36,709
;       REFERENCE/DOCKET NUMBER:  HMV-006.05
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  (617) 832-1000
;       TELEFAX:  (617) 832-7000
;   INFORMATION FOR SEQ ID NO:  43:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  24 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  cDNA
US-08-460-900C-43

  Query Match             1.5%;  Score 24;  DB 4;  Length 24;
  Best Local Similarity   100.0%;  Pred. No. 9.9e+03;
  Matches   24;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy     524 ACCGAGGGCTGGGACGAAGATGGC 547
           ||||||||||||||||||||||||
Db       1 ACCGAGGGCTGGGACGAAGATGGC 24


RESULT 10
US-08-674-509B-43
; Sequence 43, Application US/08674509B
; Patent No. 6261786
;  GENERAL INFORMATION:
;    APPLICANT:  Ingham, Phillip W.
;    APPLICANT:  McMahon, Andrew P.
;    APPLICANT:  Tabin, Clifford J.
;    APPLICANT:  Marigo, Valeria
;    TITLE OF INVENTION:  SCREENING ASSAYS FOR HEDGEGOG AGONISTS
;    TITLE OF INVENTION:  AND ANTAGONISTS
;    NUMBER OF SEQUENCES:  48
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  FOLEY, HOAG & ELIOT LLP
;      STREET:  One Post Office Square
;      CITY:  Boston
;      STATE:  MA
;      COUNTRY:  USA
;      ZIP:  02109-2170
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/674,509B
;      FILING DATE:  02-JUL-1996
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/460,900
;      FILING DATE:  05-JUN-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Vincent, Matthew P.
;      REGISTRATION NUMBER:  36,709
;      REFERENCE/DOCKET NUMBER:  HMV-006.06
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  617-832-1000
;      TELEFAX:  617-832-7000
;  INFORMATION FOR SEQ ID NO:  43:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  24 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  other nucleic acid
;      DESCRIPTION:  /desc = "primer"
US-08-674-509B-43

  Query Match             1.5%;  Score 24;  DB 4;  Length 24;
  Best Local Similarity   100.0%;  Pred. No. 9.9e+03;
  Matches   24;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy     524 ACCGAGGGCTGGGACGAAGATGGC 547
           ||||||||||||||||||||||||
Db       1 ACCGAGGGCTGGGACGAAGATGGC 24


RESULT 11
US-08-954-698-43
; Sequence 43, Application US/08954698
; Patent No. 6271363
;  GENERAL INFORMATION:
;    APPLICANT:  Ingham, Phillip W.
;    APPLICANT:  McMahon, Andrew P.
;    APPLICANT:  Tabin, Clifford J.
;    TITLE OF INVENTION:  Vertebrate Embryonic Pattern-Inducing
;    TITLE OF INVENTION:  Proteins and Uses Related Thereto
;    NUMBER OF SEQUENCES:  48
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  FOLEY, HOAG & ELIOT LLP
;      STREET:  One Post Office Square
;      CITY:  Boston
;      STATE:  MA
;      COUNTRY:  USA
;      ZIP:  02109-2170
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/954,698
;      FILING DATE:  20-OCT-1997
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/462,386
;      FILING DATE:  05-JUN-1995
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/435,093
;      FILING DATE:  04-MAY-1995
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/356,060
;      FILING DATE:  14-DEC-1994
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/176,427
;      FILING DATE:  30-DEC-1993
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Vincent, Matthew P.
;      REGISTRATION NUMBER:  36,709
;      REFERENCE/DOCKET NUMBER:  HMV-006.10
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  617-832-1000
;      TELEFAX:  617-832-7000
;  INFORMATION FOR SEQ ID NO:  43:
;    SEQUENCE CHARACTERISTICS:
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;      LENGTH:  24 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
US-08-954-698-43

  Query Match             1.5%;  Score 24;  DB 4;  Length 24;
  Best Local Similarity   100.0%;  Pred. No. 9.9e+03;
  Matches   24;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy     524 ACCGAGGGCTGGGACGAAGATGGC 547
           ||||||||||||||||||||||||
Db       1 ACCGAGGGCTGGGACGAAGATGGC 24


RESULT 12
US-08-957-874-43
; Sequence 43, Application US/08957874
; Patent No. 6384192
;  GENERAL INFORMATION:
;    APPLICANT:  Ingham, Phillip W.
;    APPLICANT:  McMahon, Andrew P.
;    APPLICANT:  Tabin, Clifford J.
;    TITLE OF INVENTION:  Vertebrate Embryonic Pattern-Inducing
;    TITLE OF INVENTION:  Proteins and Uses Related Thereto
;    NUMBER OF SEQUENCES:  47
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  FOLEY, HOAG & ELIOT LLP
;      STREET:  One Post Office Square
;      CITY:  Boston
;      STATE:  MA
;      COUNTRY:  USA
;      ZIP:  02109
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  ASCII(text)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/957,874
;      FILING DATE:  20-OCT-1997
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/462,386
;      FILING DATE:  5-JUNE-1995
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/435,093
;      FILING DATE:  4-MAY-1995
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/356,060
;      FILING DATE:  14-DEC-1994
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/176,427
;      FILING DATE:  30-DEC-1993
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Vincent, Matthew P.
;      REGISTRATION NUMBER:  36,709
;      REFERENCE/DOCKET NUMBER:  HMV-006.09
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (617) 832-1000
;      TELEFAX:  (617) 832-7000
;  INFORMATION FOR SEQ ID NO:  43:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  24 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
US-08-957-874-43

  Query Match             1.5%;  Score 24;  DB 4;  Length 24;
  Best Local Similarity   100.0%;  Pred. No. 9.9e+03;
  Matches   24;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy     524 ACCGAGGGCTGGGACGAAGATGGC 547
           ||||||||||||||||||||||||
Db       1 ACCGAGGGCTGGGACGAAGATGGC 24


RESULT 13
US-08-258-026A-13
; Sequence 13, Application US/08258026A
; Patent No. 5516637
;  GENERAL INFORMATION:
;    APPLICANT:  Huang, Grace P.
;    APPLICANT:  Rhode, Peter R.
;    APPLICANT:  Stinson, Jeffrey R.
;    APPLICANT:  Wong, Hing C.
;    TITLE OF INVENTION:  A METHOD FOR DISPLAYING PROTEINS
;    NUMBER OF SEQUENCES:  26
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  David G. Conlin; DIKE, BRONSTEIN, ROBERTS &
;      ADDRESSEE:  CUSHMAN
;      STREET:  130 WATER STREET
;      CITY:  BOSTON
;      STATE:  MASSACHUSETTS
;      COUNTRY:  US
;      ZIP:  02109
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/258,026A
;      FILING DATE:  10-JUN-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Resnick, David R.
;      REGISTRATION NUMBER:  34235
;      REFERENCE/DOCKET NUMBER:  42838
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (617) 523-3400
;      TELEFAX:  (617) 523-6400
;      TELEX:  200291 STRE UR
;  INFORMATION FOR SEQ ID NO:  13:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  45 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  unknown
US-08-258-026A-13

  Query Match             1.5%;  Score 24;  DB 1;  Length 45;
  Best Local Similarity   75.0%;  Pred. No. 1.1e+04;
  Matches   30;  Conservative    0;  Mismatches   10;  Indels    0;  Gaps    0;

Qy    1341 GCGGCGGGGACAGCGGCGGCGGGGACCGCGGGGGCGGCGG 1380
           | ||||| | ||||||||| || |    ||| ||||||||
Db       2 GTGGCGGTGGCAGCGGCGGTGGTGGTTCCGGAGGCGGCGG 41


RESULT 14
US-09-813-781-129
; Sequence 129, Application US/09813781
; Patent No. 6405989
; GENERAL INFORMATION:
;  APPLICANT: WEIDANZ, JON A.
;  APPLICANT:  CARD, KIMBERLYN F.
;  APPLICANT:  WONG, HING C.
;  TITLE OF INVENTION: FUSION PROTEINS COMPRISING BACTERIOPHAGE COAT PROTEIN
;  TITLE OF INVENTION:  AND A SINGLE-CHAIN T-CELL RECEPTOR
;  FILE REFERENCE: 46745(1758)
;  CURRENT APPLICATION NUMBER: US/09/813,781
;  CURRENT FILING DATE:  2001-03-22
;  NUMBER OF SEQ ID NOS: 130
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;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 129
;   LENGTH: 45
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence: synthetic
;   OTHER INFORMATION: oligonucleotide
US-09-813-781-129

  Query Match             1.5%;  Score 24;  DB 4;  Length 45;
  Best Local Similarity   75.0%;  Pred. No. 1.1e+04;
  Matches   30;  Conservative    0;  Mismatches   10;  Indels    0;  Gaps    0;

Qy    1341 GCGGCGGGGACAGCGGCGGCGGGGACCGCGGGGGCGGCGG 1380
           | ||||| | ||||||||| || |    ||| ||||||||
Db       2 GTGGCGGTGGCAGCGGCGGTGGTGGTTCCGGAGGCGGCGG 41


RESULT 15
PCT-US95-07541-13
; Sequence 13, Application PC/TUS9507541
;  GENERAL INFORMATION:
;    APPLICANT:  Huang, Grace P.
;    APPLICANT:  Rhode, Peter R.
;    APPLICANT:  Stinson, Jeffrey R.
;    APPLICANT:  Wong, Hing C.
;    TITLE OF INVENTION:  A METHOD FOR DISPLAYING
;    TITLE OF INVENTION:  PROTEINS
;    NUMBER OF SEQUENCES:  24
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  David G. Conlin; DIKE, BRONSTEIN,
;      ADDRESSEE:  ROBERTS & CUSHMAN
;      STREET:  130 WATER STREET
;      CITY:  BOSTON
;      STATE:  MASSACHUSETTS
;      COUNTRY:  US
;      ZIP:  02109
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US95/07541
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/258,026
;      FILING DATE:  10-JUN-1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Resnick, David R.
;      REGISTRATION NUMBER:  34235
;      REFERENCE/DOCKET NUMBER:  42838
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (617) 523-3400
;      TELEFAX:  (617) 523-6400
;      TELEX:  200291 STRE UR
;  INFORMATION FOR SEQ ID NO:  13:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  45 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  unknown
PCT-US95-07541-13

  Query Match             1.5%;  Score 24;  DB 5;  Length 45;
  Best Local Similarity   75.0%;  Pred. No. 1.1e+04;
  Matches   30;  Conservative    0;  Mismatches   10;  Indels    0;  Gaps    0;

Qy    1341 GCGGCGGGGACAGCGGCGGCGGGGACCGCGGGGGCGGCGG 1380
           | ||||| | ||||||||| || |    ||| ||||||||
Db       2 GTGGCGGTGGCAGCGGCGGTGGTGGTTCCGGAGGCGGCGG 41


RESULT 16
US-08-068-747-2/c
; Sequence 2, Application US/08068747
; Patent No. 5695933
;  GENERAL INFORMATION:
;    APPLICANT:  Schalling, Martin
;    APPLICANT:  Hudson, Thomas J.
;    APPLICANT:  Housman, David E.
;    TITLE OF INVENTION:  Direct Determination of Expanded
;    TITLE OF INVENTION:  Nucleotide Repeats in the Human Genome
;    NUMBER OF SEQUENCES:  11
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Hamilton, Brook, Smith & Reynolds, P.C.
;      STREET:  Two Militia Drive
;      CITY:  Lexington
;      STATE:  Massachusett
;      COUNTRY:  USA
;      ZIP:  02173
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/068,747
;      FILING DATE:  28-MAY-1993
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Granahan, Patricia
;      REGISTRATION NUMBER:  32,227
;      REFERENCE/DOCKET NUMBER:  MIT-6141
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  617-861-6240
;      TELEFAX:  617-861-9540
;  INFORMATION FOR SEQ ID NO:  2:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  30 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  other nucleic acid
;      DESCRIPTION:  /desc = "Synthetic"
US-08-068-747-2

  Query Match             1.5%;  Score 23.6;  DB 1;  Length 30;
  Best Local Similarity   86.7%;  Pred. No. 1.2e+04;
  Matches   26;  Conservative    0;  Mismatches    4;  Indels    0;  Gaps    0;

Qy    1354 CGGCGGCGGGGACCGCGGGGGCGGCGGCGG 1383
           ||||||||| | | |||| ||||||||||||
Db      30 CGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 1


RESULT 17
US-09-499-884-12
; Sequence 12, Application US/09499884
; Patent No. 6265172
; GENERAL INFORMATION:
;  APPLICANT:  St. Clair, Daret
;  APPLICANT:  Urano, Muneyasu
;  APPLICANT:  Kasarskis, Edward
;  TITLE OF INVENTION:   DIAGNOSTIC TEST AND THERAPY FOR MANGANESE SUPEROXIDE DISMU
;  TITLE OF INVENTION:  ASSOCIATED DISEASES
;  FILE REFERENCE:   50229-180
;  CURRENT APPLICATION NUMBER: US/09/499,884
;  CURRENT FILING DATE:  2000-02-08
;  NUMBER OF SEQ ID NOS:   12
;  SOFTWARE:   PatentIn version 3.0
; SEQ ID NO 12
;   LENGTH: 38
;   TYPE: DNA
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```
;   ORGANISM: Homo sapiens
US-09-499-884-12

  Query Match             1.5%;  Score 23.6;  DB 4;  Length 38;
  Best Local Similarity   76.3%;  Pred. No. 1.3e+04;
  Matches   29;  Conservative    0;  Mismatches    9;  Indels    0;  Gaps    0;

Qy   1340 CGCGGCGGGGACAGCGGCGGCGGGGACCGCGGGGGCGG 1377
          || ||||||| | |||| || ||||  || || |||||
Db      1 CGGGGCGGGGCCCGCGGGGGGGGGGGGCGGGGCGGCGG 38


RESULT 18
US-09-497-933A-19
; Sequence 19, Application US/09497933A
; Patent No. 6329147
; GENERAL INFORMATION:
;  APPLICANT:  Wagner, Robert Jr. E.
;  TITLE OF INVENTION:  METHODS FOR DETECTION OF A TRIPLET REPEAT BLOCK AND A
;  TITLE OF INVENTION:  FUNCTIONAL MISMATCH BINDING PROTEIN IN A BIOLOGICAL
;  TITLE OF INVENTION:  FLUID SAMPLE
;  FILE REFERENCE:  9408-044
;  CURRENT APPLICATION NUMBER: US/09/497,933A
;  CURRENT FILING DATE:  2000-02-04
;  NUMBER OF SEQ ID NOS:  25
;  SOFTWARE:  PatentIn Ver. 2.1
; SEQ ID NO 19
;   LENGTH: 48
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence: Probe
;   NAME/KEY: modified_base
;   LOCATION: (1)..(9)
;   OTHER INFORMATION: n = a, c, g or t
;   NAME/KEY: modified_base
;   LOCATION: (40)..(48)
;   OTHER INFORMATION: n = a, c, g or t
US-09-497-933A-19

  Query Match             1.5%;  Score 23.6;  DB 4;  Length 48;
  Best Local Similarity   86.7%;  Pred. No. 1.3e+04;
  Matches   26;  Conservative    0;  Mismatches    4;  Indels    0;  Gaps    0;

Qy   1354 CGGCGGCGGGGACCGCGGGGGCGGCGGCGG 1383
          ||||||||| | | |||| ||||||||||||
Db     10 CGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 39


RESULT 19
US-09-930-181-13
; Sequence 13, Application US/09930181
; Patent No. 6455292
; GENERAL INFORMATION:
;  APPLICANT: OriGene Technologies
;  TITLE OF INVENTION: Full-Length Serine Protein Kinase in Brain and Pancreas
;  FILE REFERENCE: 16U 101 V1
;  CURRENT APPLICATION NUMBER: US/09/930,181
;  CURRENT FILING DATE:  2001-08-16
;  NUMBER OF SEQ ID NOS: 18
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 13
;   LENGTH: 50
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-930-181-13

  Query Match             1.5%;  Score 23.6;  DB 4;  Length 50;
  Best Local Similarity   69.6%;  Pred. No. 1.3e+04;
  Matches   32;  Conservative    0;  Mismatches   14;  Indels    0;  Gaps    0;

Qy   1328 GCGCGCACGGACCGCGGCGGGGACAGCGGCGGCGGGGACCGCGGGG 1373
          | |||| ||  || |||| || |  |||||||||| | | |||| |

Db      5 GGGCGCGGGGCGCGGGGCGCGGGCCTCGGCGGCGGCGGCGGCGGCG 50


RESULT 20
US-08-748-591-12/c
; Sequence 12, Application US/08748591
; Patent No. 5759811
;  GENERAL INFORMATION:
;    APPLICANT:  Epstein, Ervin
;    APPLICANT:  Hu, Zhilan
;    APPLICANT:  Bonifas, Jeanette
;    TITLE OF INVENTION:  Mutant Human Hedgehog Gene
;    NUMBER OF SEQUENCES:  23
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Fish and Richardson
;      STREET:  2200 Sand Hill Road
;      CITY:  Menlo Park
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  94025
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/748,591
;      FILING DATE:
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Sherwood, Pamela J
;      REGISTRATION NUMBER:  36,677
;      REFERENCE/DOCKET NUMBER:  06510/067001
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (415) 322-5070
;      TELEFAX:  (415) 854-0875
;  INFORMATION FOR SEQ ID NO:  12:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  25 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
US-08-748-591-12

  Query Match             1.5%;  Score 23.4;  DB 1;  Length 25;
  Best Local Similarity   96.0%;  Pred. No. 1.3e+04;
  Matches   24;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy    616 CAGCAAGTACGGCATGCTGGCCCGC 640
          ||||||||||||||||||||||| |||
Db     25 CAGCAAGTACGGCATGCTGGCTCGC 1


RESULT 21
US-09-083-123-5/c
; Sequence 5, Application US/09083123
; Patent No. 6326143
; GENERAL INFORMATION:
;  APPLICANT: Orum, Hendrik
;  APPLICANT: Seeger, Corina
;  TITLE OF INVENTION: Method for Generating Multiple Double Stranded Nucleic
;  TITLE OF INVENTION: Acids
;  FILE REFERENCE: sequence listing
;  CURRENT APPLICATION NUMBER: US/09/083,123
;  CURRENT FILING DATE: 1998-05-22
;  EARLIER APPLICATION NUMBER: EP 95118600.6
;  EARLIER FILING DATE: 1995-11-25
;  EARLIER APPLICATION NUMBER: PCT/EP96/05149
;  EARLIER FILING DATE: 1996-11-22
;  NUMBER OF SEQ ID NOS: 8
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 5
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;   LENGTH: 32
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence: made by humans
US-09-083-123-5

  Query Match             1.4%;  Score 22.4;  DB 4;  Length 32;
  Best Local Similarity   81.2%;  Pred. No. 2.1e+04;
  Matches   26;  Conservative    0;  Mismatches    6;  Indels    0;  Gaps    0;

Qy   1543 CCGGGGGGCCGGGGGAGGGGCGCGGGAGGGGG 1574
          ||||||||  ||||| |||| | ||| |||||
Db     32 CCGGGGGGGGGGGGGGGGGGGGGGGGGGGGG 1


RESULT 22
US-09-325-256-30
; Sequence 30, Application US/09325256
; Patent No. 6444793
; GENERAL INFORMATION:
;  APPLICANT:  PEPINSKY, R. BLAKE
;  APPLICANT:  BAKER, DARREN P.
;  APPLICANT:  WEN, DINGYI
;  APPLICANT:  WILLIAMS, KEVIN P.
;  APPLICANT:  GARGER, ELLEN A.
;  APPLICANT:  TAYLOR, FREDERICK R.
;  APPLICANT:  GALDES, ALPHONSE
;  APPLICANT:  PORTER, JEFFREY
;  TITLE OF INVENTION:  HYDROPHOBICALLY-MODIFIED PROTEIN COMPOSITIONS AND
;  TITLE OF INVENTION:  METHODS
;  FILE REFERENCE:  BIV-067.01
;  CURRENT APPLICATION NUMBER: US/09/325,256
;  CURRENT FILING DATE:  1999-06-03
;  PRIOR APPLICATION NUMBER:  60/099,800
;  PRIOR FILING DATE:  1998-09-10
;  PRIOR APPLICATION NUMBER:  60/078,935
;  PRIOR FILING DATE:  1998-03-20
;  PRIOR APPLICATION NUMBER:  60/089,685
;  PRIOR FILING DATE:  1998-06-17
;  PRIOR APPLICATION NUMBER:  60/067,423
;  PRIOR FILING DATE:  1997-12-03
;  PRIOR APPLICATION NUMBER:  PCT/US98/25676
;  PRIOR FILING DATE:  1998-12-03
;  NUMBER OF SEQ ID NOS:  31
;  SOFTWARE:  PatentIn Ver. 2.1
; SEQ ID NO 30
;   LENGTH: 47
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence: Primer
US-09-325-256-30

  Query Match             1.4%;  Score 22;  DB 4;  Length 47;
  Best Local Similarity   100.0%;  Pred. No. 2.7e+04;
  Matches   22;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    223 CGGACCGGGCAGGGGGTTCGGG 244
          ||||||||||||||||||||||
Db     26 CGGACCGGGCAGGGGGTTCGGG 47


RESULT 23
US-08-340-045-7
; Sequence 7, Application US/08340045
; Patent No. 5637495
;  GENERAL INFORMATION:
;    APPLICANT:  AVIV, HAIM
;    APPLICANT:  GORECKI, MARIAN
;    APPLICANT:  LEVANON, AVIGDOR
;    APPLICANT:  OPPENHEIM, AMOS
;    APPLICANT:  VOGEL, TIKVA
;    APPLICANT:  ZEELON, ELISHA
;    APPLICANT:  ZEEVI, MENACHEM
;    TITLE OF INVENTION:  PLASMIDS FOR PRODUCTION OF HUMAN GROWTH
;    TITLE OF INVENTION:  HORMONE OR POLYPEPTIDE ANALOG THEREOF, HOSTS CONTAINING
;    TITLE OF INVENTION:  THE PLASMIDS, PRODUCTS MANUFACTURED THEREBY, AND RELATED
;    TITLE OF INVENTION:  METHODS
;    NUMBER OF SEQUENCES:  32
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  COOPER & DUNHAM LLP
;      STREET:  1185 AVENUE OF THE AMERICAS
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10036
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/340,045
;      FILING DATE:  14-NOV-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  WHITE, JOHN P.
;      REGISTRATION NUMBER:  28,678
;      REFERENCE/DOCKET NUMBER:  20065-G/JPW/GJG
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  212-278-0400
;      TELEFAX:  212-391-0525
;  INFORMATION FOR SEQ ID NO:  7:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  35 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA (genomic)
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
US-08-340-045-7

  Query Match             1.4%;  Score 21.8;  DB 1;  Length 35;
  Best Local Similarity   78.8%;  Pred. No. 2.8e+04;
  Matches   26;  Conservative    0;  Mismatches    7;  Indels    0;  Gaps    0;

Qy     789 AGCTGGTGAAGGACCTGAGCCCCGGGGACCGCG 821
           ||||||||  |||  |||||||| | | || |||
Db       3 AGCTGGTGCAGGTGCTGAGCCCGGAGCACAGCG 35


RESULT 24
US-08-871-302A-7
; Sequence 7, Application US/08871302A
; Patent No. 6054291
;  GENERAL INFORMATION:
;    APPLICANT:  AVIV, HAIM
;    APPLICANT:  GORECKI, MARIAN
;    APPLICANT:  LEVANON, AVIGDOR
;    APPLICANT:  OPPENHEIM, AMOS
;    APPLICANT:  VOGEL, TIKVA
;    APPLICANT:  ZEELON, ELISHA
;    APPLICANT:  ZEEVI, MENACHEM
;    TITLE OF INVENTION:  PLASMIDS FOR PRODUCTION OF HUMAN GROWTH
;    TITLE OF INVENTION:  HORMONE OR POLYPEPTIDE ANALOG THEREOF, HOSTS CONTAINING
;    TITLE OF INVENTION:  THE PLASMIDS, PRODUCTS MANUFACTURED THEREBY, AND RELATED
;    TITLE OF INVENTION:  METHODS
;    NUMBER OF SEQUENCES:  32
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  COOPER & DUNHAM LLP
;      STREET:  1185 AVENUE OF THE AMERICAS
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
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;      ZIP:  10036
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/871,302A
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/340,045
;      FILING DATE:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  WHITE, JOHN P.
;      REGISTRATION NUMBER:  28,678
;      REFERENCE/DOCKET NUMBER:  20065-G/JPW/GJG
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  212-278-0400
;      TELEFAX:  212-391-0525
;  INFORMATION FOR SEQ ID NO:  7:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  35 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA (genomic)
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
US-08-871-302A-7

  Query Match             1.4%;  Score 21.8;  DB 3;  Length 35;
  Best Local Similarity   78.8%;  Pred. No. 2.8e+04;
  Matches   26;  Conservative    0;  Mismatches    7;  Indels    0;  Gaps    0;

Qy    789 AGCTGGTGAAGGACCTGAGCCCCGGGGACCGCG 821
          |||||||| |||  |||||||| | | || |||
Db      3 AGCTGGTGCAGGTGCTGAGCCCGGAGCACAGCG 35


RESULT 25
US-09-485-737B-5
; Sequence 5, Application US/09485737B
; Patent No. 6350860
; GENERAL INFORMATION:
;  APPLICANT: Buyse, Marie-Ange
;  APPLICANT:  Sablon, Erwin
;  TITLE OF INVENTION: INTERFERON-gamma-BINDING MOLECULES FOR TREATING SEPTIC SHOCK,
;  TITLE OF INVENTION:  CACHEXIA, IMMUNE DISEASES AND SKIN DISORDERS
;  FILE REFERENCE: INNS:015
;  CURRENT APPLICATION NUMBER: US/09/485,737B
;  CURRENT FILING DATE:  2000-02-14
;  PRIOR APPLICATION NUMBER: PCT/EP 98/05165
;  PRIOR FILING DATE: 1998-08-14
;  PRIOR APPLICATION NUMBER: EPO 98870139.7
;  PRIOR FILING DATE: 1998-06-18
;  PRIOR APPLICATION NUMBER: EPO 97870122.5
;  PRIOR FILING DATE: 1997-08-18
;  NUMBER OF SEQ ID NOS: 104
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 5
;   LENGTH: 40
;   TYPE: DNA
;   ORGANISM: UNKNOWN
;   FEATURE:
;   OTHER INFORMATION: GENOMIC
US-09-485-737B-5

  Query Match             1.4%;  Score 21.6;  DB 4;  Length 40;
  Best Local Similarity   75.0%;  Pred. No. 3.1e+04;
  Matches   27;  Conservative    0;  Mismatches    9;  Indels    0;  Gaps    0;

Qy    757 GGCCACGGTGCACCTGGAGCAGGGCGGCACCAAGCT 792
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Db      5 GGCCCAGGTGCAGCTGGTGCAGAGCGGTAGCGAACT 40

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GenCore version 5.1.4_p5_4578

OM nucleic - nucleic search, using sw model

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(without alignments)
7900.996 Million cell updates/sec

Title: US-10-001-844-3
Perfect score: 1576
Sequence: 1 gcgaggcagccagcgaggga.....gaggggcgcgggaggggcc 1576

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 501302 seqs, 350932545 residues

Total number of hits satisfying chosen parameters: 282380

Minimum DB seq length: 0
Maximum DB seq length: 50

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 1000 summaries

Database : Published_Applications_NA:*
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2: /cgn2_6/ptodata/2/pubpna/PCT_NEW_PUB.seq:*
3: /cgn2_6/ptodata/2/pubpna/US06_NEW_PUB.seq:*
4: /cgn2_6/ptodata/2/pubpna/US06_PUBCOMB.seq:*
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6: /cgn2_6/ptodata/2/pubpna/PCTUS_PUBCOMB.seq:*
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14: /cgn2_6/ptodata/2/pubpna/US60_PUBCOMB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Result No.	Score	% Query Match	Length	DB	ID	Description
	1	31.4	2.0	50	10	US-09-782-650-16	Sequence 16, Appl
c	2	22	1.4	29	9	US-09-883-848A-37	Sequence 37, Appl
c	3	22	1.4	30	10	US-09-828-034-7	Sequence 7, Appli
	4	21.4	1.4	45	9	US-10-006-856A-151	Sequence 151, App
	5	20.8	1.3	45	9	US-10-135-984-6	Sequence 6, Appli
	6	20.8	1.3	46	9	US-10-135-984-4	Sequence 4, Appli
c	7	20.8	1.3	46	9	US-10-135-984-5	Sequence 5, Appli
c	8	20.8	1.3	46	9	US-10-135-984-7	Sequence 7, Appli
c	9	20.4	1.3	35	9	US-09-888-326-172	Sequence 172, App
	10	20.4	1.3	41	9	US-10-027-961A-14	Sequence 14, Appl
	11	20.4	1.3	49	10	US-09-740-002-9	Sequence 9, Appli
	12	20.2	1.3	48	12	US-10-072-152-32	Sequence 32, Appl
	13	20	1.3	45	9	US-09-992-598-122	Sequence 122, App
	14	20	1.3	45	9	US-09-989-293A-122	Sequence 122, App
	15	20	1.3	45	9	US-09-989-735-122	Sequence 122, App
	16	20	1.3	45	9	US-09-990-444-122	Sequence 122, App
	17	20	1.3	45	9	US-09-989-730-122	Sequence 122, App
	18	20	1.3	45	9	US-09-990-436-122	Sequence 122, App
	19	20	1.3	45	9	US-09-991-181-122	Sequence 122, App
	20	20	1.3	45	9	US-09-993-687-122	Sequence 122, App
	21	20	1.3	45	9	US-09-989-734-122	Sequence 122, App
	22	20	1.3	45	9	US-09-997-653-122	Sequence 122, App
	23	20	1.3	45	9	US-09-993-667-122	Sequence 122, App
	24	20	1.3	45	9	US-10-211-069-35	Sequence 35, Appl
	25	20	1.3	45	9	US-09-990-438-122	Sequence 122, App
	26	20	1.3	45	9	US-09-990-562-122	Sequence 122, App
	27	20	1.3	45	9	US-09-997-428-122	Sequence 122, App
	28	20	1.3	45	9	US-09-997-666-122	Sequence 122, App
	29	20	1.3	45	9	US-09-990-711-122	Sequence 122, App
	30	20	1.3	45	9	US-09-989-726-122	Sequence 122, App
	31	20	1.3	45	9	US-09-990-437-122	Sequence 122, App
	32	20	1.3	45	9	US-09-998-156-122	Sequence 122, App
	33	20	1.3	45	10	US-09-989-722-122	Sequence 122, App
	34	20	1.3	45	10	US-09-989-723-122	Sequence 122, App
	35	20	1.3	45	10	US-09-989-279-122	Sequence 122, App
	36	20	1.3	45	10	US-09-989-727-122	Sequence 122, App
	37	20	1.3	45	10	US-09-989-731-122	Sequence 122, App
	38	20	1.3	45	10	US-09-989-732-122	Sequence 122, App
	39	20	1.3	45	10	US-09-991-073-122	Sequence 122, App
	40	20	1.3	45	10	US-09-990-442-122	Sequence 122, App
	41	20	1.3	45	10	US-09-991-163-122	Sequence 122, App
	42	20	1.3	45	10	US-09-993-604-122	Sequence 122, App
	43	20	1.3	45	10	US-09-990-456-122	Sequence 122, App
	44	20	1.3	45	10	US-09-989-721-122	Sequence 122, App
c	45	20	1.3	47	10	US-09-785-632A-6	Sequence 6, Appli
	46	19.4	1.2	45	9	US-09-861-257-29	Sequence 29, Appl
	47	19.4	1.2	50	9	US-09-765-555-25	Sequence 25, Appl
	48	19.2	1.2	36	9	US-09-997-868-28	Sequence 28, Appl
	49	19	1.2	30	9	US-09-883-848A-36	Sequence 36, Appl
	50	19	1.2	36	9	US-09-966-781A-15	Sequence 15, Appl
c	51	19	1.2	41	9	US-09-749-873-105	Sequence 105, App
	52	19	1.2	47	10	US-09-785-632A-7	Sequence 7, Appli
c	53	19	1.2	50	10	US-09-782-650-16	Sequence 16, Appl
	54	18.8	1.2	40	9	US-09-876-082-75	Sequence 75, Appl
	55	18.8	1.2	40	9	US-09-875-082-75	Sequence 75, Appl
c	56	18.8	1.2	42	9	US-09-747-377-486	Sequence 486, App
c	57	18.8	1.2	47	9	US-09-876-082-56	Sequence 56, Appl
c	58	18.8	1.2	47	9	US-09-875-082-56	Sequence 56, Appl
	59	18.8	1.2	50	10	US-09-874-547-6	Sequence 6, Appli
	60	18.6	1.2	45	9	US-09-905-291A-313	Sequence 313, App
c	61	18.6	1.2	45	9	US-09-992-598-122	Sequence 122, App
c	62	18.6	1.2	45	9	US-09-989-293A-122	Sequence 122, App
	63	18.6	1.2	45	9	US-09-902-853-313	Sequence 313, App
c	64	18.6	1.2	45	9	US-09-989-735-122	Sequence 122, App
c	65	18.6	1.2	45	9	US-09-990-444-122	Sequence 122, App
	66	18.6	1.2	45	9	US-09-907-824-313	Sequence 313, App
	67	18.6	1.2	45	9	US-09-907-841-313	Sequence 313, App
c	68	18.6	1.2	45	9	US-09-989-730-122	Sequence 122, App
c	69	18.6	1.2	45	9	US-09-990-436-122	Sequence 122, App
c	70	18.6	1.2	45	9	US-09-991-181-122	Sequence 122, App
c	71	18.6	1.2	45	9	US-09-993-687-122	Sequence 122, App
	72	18.6	1.2	45	9	US-09-904-011-313	Sequence 313, App
c	73	18.6	1.2	45	9	US-09-989-734-122	Sequence 122, App
c	74	18.6	1.2	45	9	US-09-997-653-122	Sequence 122, App
	75	18.6	1.2	45	9	US-09-906-742-313	Sequence 313, App
c	76	18.6	1.2	45	9	US-09-993-667-122	Sequence 122, App
	77	18.6	1.2	45	9	US-10-211-069-37	Sequence 37, Appl
	78	18.6	1.2	45	9	US-09-906-838-313	Sequence 313, App
	79	18.6	1.2	45	9	US-09-907-613-313	Sequence 313, App
	80	18.6	1.2	45	9	US-09-907-942-313	Sequence 313, App
c	81	18.6	1.2	45	9	US-09-990-438-122	Sequence 122, App
c	82	18.6	1.2	45	9	US-09-990-562-122	Sequence 122, App
c	83	18.6	1.2	45	9	US-09-997-428-122	Sequence 122, App
c	84	18.6	1.2	45	9	US-09-997-666-122	Sequence 122, App
c	85	18.6	1.2	45	9	US-09-990-711-122	Sequence 122, App
	86	18.6	1.2	45	9	US-09-904-820-313	Sequence 313, App
	87	18.6	1.2	45	9	US-09-904-859-313	Sequence 313, App
	88	18.6	1.2	45	9	US-09-909-204-313	Sequence 313, App
	89	18.6	1.2	45	9	US-09-904-786-313	Sequence 313, App
	90	18.6	1.2	45	9	US-09-906-646-313	Sequence 313, App
	91	18.6	1.2	45	9	US-09-906-700-313	Sequence 313, App
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c	96	18.6	1.2	45	9	US-09-990-437-122
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c	103	18.6	1.2	45	10	US-09-989-732-122
c	104	18.6	1.2	45	10	US-09-991-073-122
	105	18.6	1.2	45	10	US-09-909-320-313
c	106	18.6	1.2	45	10	US-09-990-442-122
c	107	18.6	1.2	45	10	US-09-991-163-122
c	108	18.6	1.2	45	10	US-09-993-604-122
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	111	18.6	1.2	45	10	US-09-909-088B-313
c	112	18.4	1.2	28	9	US-09-888-326-171
	113	18.4	1.2	31	10	US-09-801-274-1108
	114	18.4	1.2	45	9	US-09-944-413-53
	115	18.4	1.2	45	9	US-09-944-403-53
	116	18.4	1.2	45	9	US-09-944-896-53
	117	18.4	1.2	45	9	US-09-944-944-53
	118	18.4	1.2	45	9	US-09-944-907-53
	119	18.4	1.2	45	9	US-09-944-929-53
	120	18.4	1.2	45	9	US-09-300-425B-11
	121	18.4	1.2	45	10	US-09-866-028-53
	122	18.4	1.2	45	10	US-09-944-449-53
	123	18.4	1.2	45	10	US-09-944-457-53
	124	18.4	1.2	45	10	US-09-945-587-53
	125	18.4	1.2	45	10	US-09-945-015-53
	126	18.4	1.2	45	10	US-09-944-396-53
	127	18.4	1.2	45	10	US-09-944-097-53
	128	18.4	1.2	45	10	US-09-944-432-53
	129	18.4	1.2	45	10	US-09-943-762-53
	130	18.4	1.2	45	10	US-09-944-654-53
	131	18.4	1.2	45	10	US-09-943-851A-53
	132	18.4	1.2	47	9	US-09-908-153B-8
	133	18.4	1.2	49	10	US-09-785-632A-8
	134	18.2	1.2	31	10	US-09-911-935A-10
	135	18.2	1.2	39	9	US-09-900-379-37
c	136	18.2	1.2	39	9	US-10-080-980-26
	137	18.2	1.2	39	10	US-09-848-164-37
c	138	18.2	1.2	40	9	US-09-943-722-114
	139	18.2	1.2	42	9	US-09-861-257-27
	140	18.2	1.2	45	10	US-09-893-615-71
	141	18	1.1	35	9	US-09-735-056-4
	142	18	1.1	42	10	US-09-845-160-12
	143	18	1.1	43	10	US-09-894-788-20
	144	18	1.1	43	10	US-09-894-796-20
	145	17.8	1.1	31	9	US-09-912-263-430
	146	17.8	1.1	31	10	US-09-801-274-125
	147	17.8	1.1	31	10	US-09-801-274-1526
	148	17.8	1.1	39	9	US-10-067-790-45
	149	17.8	1.1	39	9	US-10-067-892-45
	150	17.8	1.1	39	9	US-09-539-382-45
	151	17.8	1.1	39	9	US-10-067-893-45
c	152	17.8	1.1	39	10	US-09-760-574-57
	153	17.6	1.1	30	10	US-09-892-074-7
c	154	17.6	1.1	32	10	US-09-896-650A-20
c	155	17.6	1.1	40	9	US-09-826-025-19
c	156	17.6	1.1	41	9	US-09-733-042-23
c	157	17.6	1.1	41	10	US-09-875-519A-1
c	158	17.6	1.1	42	9	US-10-083-590-7
	159	17.6	1.1	44	7	US-08-325-278-7
	160	17.6	1.1	47	9	US-09-853-526-269
c	161	17.6	1.1	47	10	US-09-912-165-7
	162	17.6	1.1	47	10	US-09-901-484A-269
	163	17.6	1.1	48	9	US-09-978-917A-29
c	164	17.6	1.1	48	9	US-09-978-917A-30
	165	17.6	1.1	50	9	US-10-125-751-17

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	166	17.6	1.1	50	9	US-09-912-552-17
	167	17.6	1.1	50	9	US-10-036-949-39
	168	17.6	1.1	50	10	US-09-740-002-7
	169	17.6	1.1	50	10	US-09-918-029-17
	170	17.6	1.1	50	12	US-10-038-271-17
c	171	17.4	1.1	31	9	US-09-912-263-496
c	172	17.4	1.1	31	10	US-09-801-274-213
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	174	17.4	1.1	31	10	US-09-801-274-676
	175	17.4	1.1	31	10	US-09-801-274-959
	176	17.4	1.1	31	10	US-09-801-274-1211
	177	17.4	1.1	35	9	US-09-771-009-70
	178	17.4	1.1	35	10	US-09-732-348-8
c	179	17.4	1.1	45	9	US-10-007-132-7
c	180	17.4	1.1	49	10	US-09-785-632A-8
	181	17.4	1.1	50	8	US-08-978-633-28
c	182	17.4	1.1	50	8	US-08-978-633-29
	183	17.4	1.1	50	8	US-08-978-634-28
c	184	17.4	1.1	50	8	US-08-978-634-29
	185	17.4	1.1	50	8	US-08-978-637-28
c	186	17.4	1.1	50	8	US-08-978-637-29
	187	17.4	1.1	50	8	US-08-978-632-28
c	188	17.4	1.1	50	8	US-08-978-632-29
	189	17.4	1.1	50	9	US-10-073-300-14
	190	17.4	1.1	50	9	US-10-073-300-15
c	191	17.4	1.1	50	9	US-09-765-555-23
c	192	17.2	1.1	24	9	US-09-837-621-31
c	193	17.2	1.1	24	10	US-09-788-038-31
c	194	17.2	1.1	30	9	US-09-953-052-21
	195	17.2	1.1	31	9	US-09-912-263-286
c	196	17.2	1.1	42	9	US-09-252-150-41
c	197	17.2	1.1	42	10	US-09-845-160-13
	198	17.2	1.1	48	10	US-09-971-798-25
	199	17.2	1.1	49	10	US-09-740-002-8
c	200	17.2	1.1	50	9	US-09-765-555-25
	201	17.2	1.1	50	10	US-09-874-547-5
	202	17.2	1.1	50	10	US-09-874-547-9
	203	17	1.1	25	12	US-10-101-040-5
c	204	17	1.1	31	10	US-09-731-030A-3
	205	17	1.1	32	10	US-09-828-447-31
c	206	17	1.1	32	10	US-09-910-120-50
c	207	17	1.1	33	9	US-10-027-961A-15
c	208	17	1.1	33	9	US-09-227-718-7
	209	17	1.1	35	9	US-09-991-470-7
c	210	17	1.1	35	10	US-09-776-490-65
c	211	17	1.1	35	10	US-09-776-491-65
c	212	17	1.1	35	10	US-09-783-580-12
	213	17	1.1	36	9	US-09-957-995A-24
c	214	17	1.1	37	9	US-10-074-302-8
c	215	17	1.1	37	9	US-10-096-723-8
c	216	17	1.1	37	9	US-10-146-329-2
c	217	17	1.1	37	10	US-09-887-854-8
	218	17	1.1	39	9	US-10-067-790-49
	219	17	1.1	39	9	US-10-067-892-49
	220	17	1.1	39	9	US-09-539-382-49
	221	17	1.1	39	9	US-10-067-893-49
	222	17	1.1	39	10	US-09-874-547-26
	223	17	1.1	39	10	US-09-874-547-29
	224	17	1.1	40	10	US-09-245-802-128
	225	17	1.1	42	9	US-10-225-322-12
	226	17	1.1	42	10	US-09-388-089B-14
	227	17	1.1	44	10	US-09-877-935-5
c	228	17	1.1	45	9	US-10-012-896-784
c	229	17	1.1	45	9	US-10-135-984-6
c	230	17	1.1	45	9	US-09-895-793-784
c	231	17	1.1	45	9	US-09-895-814-784
c	232	17	1.1	45	10	US-09-759-143-784
c	233	17	1.1	45	10	US-09-780-669-784
c	234	17	1.1	45	10	US-09-822-827-784
	235	17	1.1	45	10	US-09-850-165-24
	236	17	1.1	47	10	US-09-785-632A-15
c	237	17	1.1	49	9	US-09-894-844-137
	238	17	1.1	49	10	US-09-740-002-10

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c	239	17	1.1	49	10	US-09-785-632A-9
c	240	17	1.1	50	10	US-09-990-080-17
	241	16.8	1.1	30	9	US-10-057-467-13
	242	16.8	1.1	31	10	US-09-801-274-531
c	243	16.8	1.1	31	10	US-09-801-274-1526
c	244	16.8	1.1	36	8	US-08-786-531B-8
c	245	16.8	1.1	36	10	US-09-245-487B-25
c	246	16.8	1.1	40	9	US-09-747-419-26
	247	16.8	1.1	40	9	US-09-943-722-126
	248	16.8	1.1	41	9	US-09-966-277-19
c	249	16.8	1.1	41	9	US-09-966-277-20
	250	16.8	1.1	41	9	US-09-966-930-19
c	251	16.8	1.1	41	9	US-09-966-930-20
c	252	16.8	1.1	41	10	US-09-908-660-5
c	253	16.8	1.1	43	9	US-09-978-295A-450
c	254	16.8	1.1	43	9	US-09-916-510A-12
c	255	16.8	1.1	43	9	US-09-978-697-450
c	256	16.8	1.1	43	9	US-09-978-192A-450
c	257	16.8	1.1	43	9	US-09-999-832A-450
c	258	16.8	1.1	43	9	US-09-978-189-450
c	259	16.8	1.1	43	9	US-09-978-608A-450
	260	16.8	1.1	45	9	US-10-124-880-56
	261	16.8	1.1	48	9	US-09-864-785-3343
c	262	16.8	1.1	48	10	US-09-880-732-55
c	263	16.8	1.1	49	10	US-09-179-536B-119
c	264	16.8	1.1	50	9	US-10-012-896-969
c	265	16.8	1.1	50	9	US-09-895-814-969
c	266	16.8	1.1	50	9	US-09-765-555-29
	267	16.8	1.1	50	10	US-09-990-080-17
	268	16.6	1.1	25	10	US-09-866-108-3140
	269	16.6	1.1	25	10	US-09-866-108-3141
	270	16.6	1.1	25	10	US-09-866-108-3142
	271	16.6	1.1	31	10	US-09-911-935A-8
c	272	16.6	1.1	32	10	US-09-896-650A-18
	273	16.6	1.1	33	9	US-09-756-854-13
	274	16.6	1.1	33	9	US-10-041-574-13
c	275	16.6	1.1	33	10	US-09-757-824-1
c	276	16.6	1.1	34	9	US-10-158-895-46
c	277	16.6	1.1	36	9	US-10-057-558-35
c	278	16.6	1.1	36	9	US-10-072-438-14
c	279	16.6	1.1	36	9	US-10-072-438-28
c	280	16.6	1.1	36	9	US-10-137-765-18
c	281	16.6	1.1	36	9	US-10-146-337-18
	282	16.6	1.1	37	10	US-09-736-969A-68
	283	16.6	1.1	38	9	US-09-864-785-917
	284	16.6	1.1	38	9	US-09-864-785-1037
	285	16.6	1.1	39	9	US-10-046-922-74
	286	16.6	1.1	39	9	US-09-777-597A-12
	287	16.6	1.1	42	9	US-10-188-947-7
c	288	16.6	1.1	42	9	US-10-083-590-2
c	289	16.6	1.1	42	10	US-09-790-417-235
c	290	16.6	1.1	43	9	US-10-085-853-28
	291	16.6	1.1	45	9	US-09-735-056-22
	292	16.6	1.1	46	10	US-09-795-006A-29
c	293	16.6	1.1	48	9	US-09-995-847-22
	294	16.6	1.1	48	10	US-09-939-484-24
	295	16.6	1.1	48	10	US-09-939-483-24
	296	16.6	1.1	49	10	US-09-973-322-20
	297	16.6	1.1	50	9	US-09-990-046-6
	298	16.6	1.1	50	9	US-09-900-425A-32
c	299	16.6	1.1	50	9	US-10-125-751-18
c	300	16.6	1.1	50	9	US-09-912-552-18
c	301	16.6	1.1	50	9	US-10-011-931-12
c	302	16.6	1.1	50	9	US-10-036-949-40
	303	16.6	1.1	50	9	US-10-079-185-32
c	304	16.6	1.1	50	10	US-09-912-436-15
c	305	16.6	1.1	50	10	US-09-918-029-18
c	306	16.6	1.1	50	10	US-09-900-062-44
c	307	16.6	1.1	50	12	US-10-038-271-18
c	308	16.4	1.0	18	10	US-09-797-862-23
	309	16.4	1.0	21	10	US-09-798-058-13
c	310	16.4	1.0	27	10	US-09-735-363A-6
	311	16.4	1.0	28	10	US-09-867-475-4

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c	312	16.4	1.0	28	10	US-09-867-475-4
	313	16.4	1.0	30	9	US-09-841-236C-3
	314	16.4	1.0	31	10	US-09-801-274-162
	315	16.4	1.0	31	10	US-09-801-274-740
	316	16.4	1.0	31	10	US-09-801-274-825
c	317	16.4	1.0	31	10	US-09-801-274-1737
	318	16.4	1.0	31	10	US-09-777-430A-16
	319	16.4	1.0	32	10	US-09-480-236-11
	320	16.4	1.0	33	9	US-10-012-896-488
	321	16.4	1.0	33	9	US-09-895-793-488
	322	16.4	1.0	33	9	US-09-895-814-488
	323	16.4	1.0	33	10	US-09-759-143-488
	324	16.4	1.0	33	10	US-09-780-669-488
	325	16.4	1.0	33	10	US-09-822-827-488
	326	16.4	1.0	33	10	US-09-971-798-15
	327	16.4	1.0	35	9	US-09-988-115A-68
	328	16.4	1.0	36	9	US-09-733-042-24
	329	16.4	1.0	36	10	US-09-504-231A-1701
	330	16.4	1.0	36	10	US-09-504-231A-2479
	331	16.4	1.0	36	10	US-09-245-487B-27
	332	16.4	1.0	36	10	US-09-274-553D-1701
	333	16.4	1.0	36	10	US-09-274-553D-2479
	334	16.4	1.0	39	9	US-09-925-664-62
	335	16.4	1.0	39	10	US-09-874-547-28
c	336	16.4	1.0	40	9	US-10-125-635A-371
	337	16.4	1.0	40	10	US-09-814-292-16
	338	16.4	1.0	42	9	US-10-097-597-11
	339	16.4	1.0	42	9	US-10-097-580-11
c	340	16.4	1.0	42	9	US-10-045-631A-23
	341	16.4	1.0	42	10	US-09-445-023A-11
c	342	16.4	1.0	45	9	US-09-957-641-10
	343	16.4	1.0	45	9	US-09-957-641-18
	344	16.4	1.0	45	9	US-10-211-069-42
	345	16.4	1.0	45	10	US-09-742-693-3
	346	16.4	1.0	45	10	US-09-893-615-68
	347	16.4	1.0	45	10	US-09-893-615-72
	348	16.4	1.0	47	9	US-09-876-082-54
	349	16.4	1.0	47	9	US-09-875-082-54
	350	16.4	1.0	48	9	US-09-991-209-8
c	351	16.4	1.0	48	9	US-10-090-215-3
	352	16.4	1.0	49	10	US-09-785-632A-9
	353	16.4	1.0	50	10	US-09-874-547-11
c	354	16.2	1.0	21	10	US-09-828-034-10
	355	16.2	1.0	22	9	US-09-837-621-32
c	356	16.2	1.0	22	9	US-09-837-621-35
	357	16.2	1.0	22	10	US-09-788-038-32
c	358	16.2	1.0	22	10	US-09-788-038-35
c	359	16.2	1.0	24	9	US-09-837-621-28
c	360	16.2	1.0	24	9	US-09-837-621-29
c	361	16.2	1.0	24	9	US-09-837-621-30
c	362	16.2	1.0	24	10	US-09-788-038-28
c	363	16.2	1.0	24	10	US-09-788-038-29
c	364	16.2	1.0	24	10	US-09-788-038-30
	365	16.2	1.0	25	10	US-09-866-108-3143
	366	16.2	1.0	25	10	US-09-866-108-3144
c	367	16.2	1.0	27	10	US-09-965-553-39
	368	16.2	1.0	29	10	US-09-899-917-7
	369	16.2	1.0	29	10	US-09-899-917-10
	370	16.2	1.0	30	9	US-09-953-052-5
c	371	16.2	1.0	30	9	US-09-953-052-7
	372	16.2	1.0	30	10	US-09-897-042-10
	373	16.2	1.0	31	9	US-09-961-077-414
	374	16.2	1.0	31	9	US-09-912-263-39
	375	16.2	1.0	31	9	US-09-912-263-212
	376	16.2	1.0	31	9	US-09-912-263-243
c	377	16.2	1.0	31	9	US-09-912-263-371
	378	16.2	1.0	31	10	US-09-801-274-181
	379	16.2	1.0	31	10	US-09-801-274-337
	380	16.2	1.0	31	10	US-09-801-274-1345
c	381	16.2	1.0	31	10	US-09-801-274-1423
	382	16.2	1.0	31	10	US-09-801-274-1594
	383	16.2	1.0	31	10	US-09-801-274-1601
	384	16.2	1.0	32	9	US-09-847-101B-41

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	385	16.2	1.0	34	10	US-09-790-417-234
c	386	16.2	1.0	35	9	US-09-850-514-48
	387	16.2	1.0	36	9	US-09-991-209-62
	388	16.2	1.0	37	10	US-09-504-231A-3220
	389	16.2	1.0	37	10	US-09-760-574-13
	390	16.2	1.0	38	9	US-09-864-785-780
	391	16.2	1.0	38	9	US-10-201-310-6
	392	16.2	1.0	38	9	US-09-941-492-30
	393	16.2	1.0	38	10	US-09-874-547-62
	394	16.2	1.0	38	10	US-09-874-547-76
	395	16.2	1.0	38	10	US-09-756-095-30
c	396	16.2	1.0	39	9	US-09-925-664-4
	397	16.2	1.0	39	9	US-09-925-664-5
c	398	16.2	1.0	41	9	US-09-998-425-52
c	399	16.2	1.0	41	9	US-09-997-977-52
	400	16.2	1.0	42	9	US-09-862-393-2
c	401	16.2	1.0	42	9	US-10-038-723-74
	402	16.2	1.0	42	10	US-09-727-311-48
c	403	16.2	1.0	42	10	US-09-790-417-233
c	404	16.2	1.0	42	10	US-09-843-856-7
c	405	16.2	1.0	42	10	US-09-765-111A-9
	406	16.2	1.0	43	9	US-09-905-291A-173
	407	16.2	1.0	43	9	US-09-902-853-173
	408	16.2	1.0	43	9	US-09-907-824-173
	409	16.2	1.0	43	9	US-09-907-841-173
	410	16.2	1.0	43	9	US-09-904-011-173
	411	16.2	1.0	43	9	US-09-906-742-173
	412	16.2	1.0	43	9	US-09-906-838-173
	413	16.2	1.0	43	9	US-09-907-613-173
	414	16.2	1.0	43	9	US-09-907-942-173
	415	16.2	1.0	43	9	US-09-904-820-173
	416	16.2	1.0	43	9	US-09-904-859-173
	417	16.2	1.0	43	9	US-09-909-204-173
	418	16.2	1.0	43	9	US-09-904-786-173
	419	16.2	1.0	43	9	US-09-906-646-173
	420	16.2	1.0	43	9	US-09-906-700-173
	421	16.2	1.0	43	9	US-09-902-903-173
	422	16.2	1.0	43	9	US-09-903-749A-173
	423	16.2	1.0	43	9	US-09-903-786-173
	424	16.2	1.0	43	10	US-09-909-320-173
	425	16.2	1.0	43	10	US-09-909-088B-173
	426	16.2	1.0	45	9	US-10-125-751-22
	427	16.2	1.0	45	9	US-10-036-949-47
c	428	16.2	1.0	45	10	US-09-735-995-96
	429	16.2	1.0	45	10	US-09-976-787-18
	430	16.2	1.0	45	10	US-09-918-029-22
	431	16.2	1.0	45	10	US-09-865-198-18
	432	16.2	1.0	45	10	US-09-900-062-47
	433	16.2	1.0	45	12	US-10-038-271-22
c	434	16.2	1.0	46	10	US-09-758-386-14
c	435	16.2	1.0	46	10	US-09-758-386-15
c	436	16.2	1.0	47	9	US-10-022-609-8
	437	16.2	1.0	47	9	US-10-121-746-61
	438	16.2	1.0	47	10	US-09-740-002-3
	439	16.2	1.0	48	9	US-09-943-722-39
c	440	16.2	1.0	48	10	US-09-971-798-25
c	441	16.2	1.0	50	9	US-10-011-931-28
	442	16.2	1.0	50	9	US-09-765-555-23
	443	16.2	1.0	50	10	US-09-920-171-38
c	444	16.2	1.0	50	10	US-09-946-175-43
c	445	16	1.0	24	9	US-09-888-326-170
	446	16	1.0	25	9	US-09-872-462-442
	447	16	1.0	25	9	US-09-872-462-443
c	448	16	1.0	25	10	US-09-866-108-4465
c	449	16	1.0	25	10	US-09-866-108-4466
c	450	16	1.0	25	10	US-09-866-108-4885
c	451	16	1.0	25	10	US-09-866-108-4886
c	452	16	1.0	25	10	US-09-896-650A-26
	453	16	1.0	29	10	US-09-729-674-242
c	454	16	1.0	29	10	US-09-993-170-55
c	455	16	1.0	30	12	US-10-011-859-21
c	456	16	1.0	31	10	US-09-801-274-787
c	457	16	1.0	31	10	US-09-801-274-882

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	458	16	1.0	31	10	US-09-801-274-989
	459	16	1.0	32	10	US-09-923-246-62
	460	16	1.0	33	9	US-09-416-579A-4
c	461	16	1.0	33	9	US-09-966-781A-21
c	462	16	1.0	33	10	US-09-922-378-13
c	463	16	1.0	33	12	US-10-066-179-13
c	464	16	1.0	35	9	US-09-376-940-21
	465	16	1.0	37	9	US-09-938-433-3
	466	16	1.0	37	10	US-09-788-209A-3
	467	16	1.0	38	9	US-09-864-785-821
c	468	16	1.0	38	9	US-09-864-785-874
	469	16	1.0	38	9	US-09-864-785-1097
c	470	16	1.0	38	9	US-09-864-785-1212
c	471	16	1.0	39	9	US-09-996-140-22
	472	16	1.0	39	9	US-09-925-664-60
c	473	16	1.0	39	10	US-09-784-990-23
c	474	16	1.0	39	10	US-09-469-522-15
c	475	16	1.0	40	10	US-09-245-802-11
c	476	16	1.0	41	9	US-09-185-904A-17
c	477	16	1.0	41	10	US-09-811-094-17
c	478	16	1.0	41	10	US-09-810-644-17
c	479	16	1.0	42	9	US-09-900-379-38
c	480	16	1.0	42	10	US-09-848-164-38
c	481	16	1.0	42	10	US-09-978-752-4
c	482	16	1.0	42	10	US-09-780-929-99
	483	16	1.0	43	9	US-09-376-940-23
c	484	16	1.0	43	9	US-09-376-940-23
	485	16	1.0	43	10	US-09-766-898-12
	486	16	1.0	43	10	US-09-766-916-12
c	487	16	1.0	44	9	US-09-252-150-48
	488	16	1.0	44	9	US-09-996-634-159
c	489	16	1.0	45	9	US-09-905-291A-37
c	490	16	1.0	45	9	US-09-902-853-37
c	491	16	1.0	45	9	US-09-907-824-37
c	492	16	1.0	45	9	US-09-907-841-37
c	493	16	1.0	45	9	US-09-904-011-37
c	494	16	1.0	45	9	US-09-906-742-37
c	495	16	1.0	45	9	US-09-906-838-37
c	496	16	1.0	45	9	US-09-907-613-37
c	497	16	1.0	45	9	US-09-907-942-37
c	498	16	1.0	45	9	US-09-904-820-37
c	499	16	1.0	45	9	US-09-904-859-37
c	500	16	1.0	45	9	US-09-909-204-37
c	501	16	1.0	45	9	US-09-904-786-37
c	502	16	1.0	45	9	US-09-906-646-37
c	503	16	1.0	45	9	US-09-906-700-37
c	504	16	1.0	45	9	US-09-902-903-37
c	505	16	1.0	45	9	US-09-903-749A-37
c	506	16	1.0	45	9	US-09-903-786-37
c	507	16	1.0	45	10	US-09-909-320-37
c	508	16	1.0	45	10	US-09-909-088B-37
	509	16	1.0	46	9	US-09-938-433-16
	510	16	1.0	46	10	US-09-788-209A-16
c	511	16	1.0	46	10	US-09-384-472-5
	512	16	1.0	47	9	US-09-853-526-192
	513	16	1.0	47	9	US-09-853-526-250
c	514	16	1.0	47	9	US-10-211-069-27
c	515	16	1.0	47	10	US-09-785-632A-14
	516	16	1.0	47	10	US-09-901-484A-192
	517	16	1.0	47	10	US-09-901-484A-250
	518	16	1.0	49	9	US-09-796-679-15
c	519	16	1.0	49	9	US-09-978-917A-25
	520	16	1.0	49	10	US-09-920-552-125
	521	16	1.0	50	9	US-10-007-132-8
c	522	16	1.0	50	10	US-09-284-663A-30
	523	16	1.0	50	10	US-09-874-547-12
	524	16	1.0	50	10	US-09-783-590-12183
	525	16	1.0	50	10	US-09-223-490-20
	526	15.8	1.0	20	9	US-09-888-326-410
c	527	15.8	1.0	20	10	US-09-791-406-46
	528	15.8	1.0	21	10	US-09-984-183-22
	529	15.8	1.0	24	10	US-09-766-378A-31
c	530	15.8	1.0	25	10	US-09-771-838A-13

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c	531	15.8	1.0	25	10	US-09-866-108-10883
c	532	15.8	1.0	25	10	US-09-866-108-10884
c	533	15.8	1.0	25	10	US-09-866-108-10885
c	534	15.8	1.0	25	10	US-09-866-108-10886
c	535	15.8	1.0	25	10	US-09-866-108-10887
c	536	15.8	1.0	25	10	US-09-866-108-10888
c	537	15.8	1.0	25	10	US-09-866-108-10889
c	538	15.8	1.0	27	9	US-10-041-090-2
c	539	15.8	1.0	27	9	US-09-877-705A-61
	540	15.8	1.0	27	9	US-09-877-705A-62
c	541	15.8	1.0	27	9	US-09-877-738A-61
	542	15.8	1.0	27	9	US-09-877-738A-62
	543	15.8	1.0	27	10	US-09-735-363A-3
	544	15.8	1.0	27	10	US-09-735-363A-68
c	545	15.8	1.0	27	10	US-09-894-633A-41
	546	15.8	1.0	27	12	US-10-017-828-14
c	547	15.8	1.0	28	9	US-09-944-413-9
c	548	15.8	1.0	28	9	US-09-944-403-9
c	549	15.8	1.0	28	9	US-09-944-896-9
c	550	15.8	1.0	28	9	US-09-944-944-9
c	551	15.8	1.0	28	9	US-09-944-907-9
c	552	15.8	1.0	28	9	US-09-944-929-9
c	553	15.8	1.0	28	10	US-09-866-028-9
c	554	15.8	1.0	28	10	US-09-944-449-9
c	555	15.8	1.0	28	10	US-09-944-457-9
c	556	15.8	1.0	28	10	US-09-945-587-9
c	557	15.8	1.0	28	10	US-09-945-015-9
c	558	15.8	1.0	28	10	US-09-944-396-9
c	559	15.8	1.0	28	10	US-09-944-097-9
c	560	15.8	1.0	28	10	US-09-944-432-9
c	561	15.8	1.0	28	10	US-09-943-762-9
c	562	15.8	1.0	28	10	US-09-944-654-9
c	563	15.8	1.0	28	10	US-09-943-851A-9
c	564	15.8	1.0	30	9	US-09-953-052-11
	565	15.8	1.0	30	9	US-09-953-052-16
	566	15.8	1.0	30	9	US-10-010-920-40
	567	15.8	1.0	30	10	US-09-292-973-18
	568	15.8	1.0	30	10	US-09-965-099-27
	569	15.8	1.0	30	12	US-10-051-852-27
	570	15.8	1.0	31	9	US-09-778-900A-12
c	571	15.8	1.0	31	10	US-09-801-274-40
c	572	15.8	1.0	31	10	US-09-801-274-1288
c	573	15.8	1.0	32	8	US-08-462-159B-3
c	574	15.8	1.0	33	9	US-09-932-367A-55
c	575	15.8	1.0	33	9	US-09-932-367A-62
	576	15.8	1.0	34	9	US-10-124-880-58
	577	15.8	1.0	34	10	US-09-790-417-232
c	578	15.8	1.0	36	9	US-10-097-556-2
c	579	15.8	1.0	36	9	US-09-907-111-219
c	580	15.8	1.0	36	9	US-10-056-414-402
c	581	15.8	1.0	37	9	US-10-192-085-9
	582	15.8	1.0	37	10	US-09-847-185-49
	583	15.8	1.0	38	9	US-09-864-785-1108
c	584	15.8	1.0	38	9	US-09-864-785-1398
	585	15.8	1.0	38	10	US-09-738-968-31
c	586	15.8	1.0	39	9	US-09-211-424-27
	587	15.8	1.0	39	9	US-10-079-818-31
c	588	15.8	1.0	39	10	US-09-263-959-225
c	589	15.8	1.0	39	12	US-10-139-262-32
c	590	15.8	1.0	40	9	US-10-101-392-16
c	591	15.8	1.0	40	9	US-10-101-392-18
	592	15.8	1.0	41	9	US-10-119-466-10
c	593	15.8	1.0	41	9	US-09-185-904A-27
	594	15.8	1.0	41	9	US-09-988-462-87
c	595	15.8	1.0	41	10	US-09-811-094-27
c	596	15.8	1.0	41	10	US-09-810-644-27
	597	15.8	1.0	44	9	US-09-950-335A-15
	598	15.8	1.0	45	9	US-09-905-291A-94
c	599	15.8	1.0	45	9	US-09-925-664-73
c	600	15.8	1.0	45	9	US-09-925-922-15
	601	15.8	1.0	45	9	US-09-902-853-94
	602	15.8	1.0	45	9	US-09-907-824-94
	603	15.8	1.0	45	9	US-09-907-841-94

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	604	15.8	1.0	45	9	US-09-904-011-94
	605	15.8	1.0	45	9	US-09-906-742-94
c	606	15.8	1.0	45	9	US-10-211-069-33
	607	15.8	1.0	45	9	US-09-906-838-94
	608	15.8	1.0	45	9	US-09-907-613-94
	609	15.8	1.0	45	9	US-09-907-942-94
	610	15.8	1.0	45	9	US-09-904-820-94
	611	15.8	1.0	45	9	US-09-904-859-94
	612	15.8	1.0	45	9	US-09-909-204-94
	613	15.8	1.0	45	9	US-09-904-786-94
	614	15.8	1.0	45	9	US-09-906-646-94
	615	15.8	1.0	45	9	US-09-906-700-94
	616	15.8	1.0	45	9	US-09-902-903-94
	617	15.8	1.0	45	9	US-09-903-749A-94
	618	15.8	1.0	45	9	US-09-903-786-94
c	619	15.8	1.0	45	10	US-09-742-693-2
	620	15.8	1.0	45	10	US-09-909-320-94
	621	15.8	1.0	45	10	US-09-772-719-17
	622	15.8	1.0	45	10	US-09-896-650A-1
	623	15.8	1.0	45	10	US-09-909-088B-94
	624	15.8	1.0	46	9	US-09-900-379-64
	625	15.8	1.0	46	10	US-09-216-393-362
	626	15.8	1.0	46	10	US-09-766-898-14
	627	15.8	1.0	46	10	US-09-766-898-25
	628	15.8	1.0	46	10	US-09-766-916-14
	629	15.8	1.0	46	10	US-09-766-916-25
	630	15.8	1.0	46	10	US-09-848-164-64
	631	15.8	1.0	46	10	US-09-384-472-5
	632	15.8	1.0	47	10	US-09-785-632A-13
	633	15.8	1.0	47	10	US-09-880-732-56
c	634	15.8	1.0	49	9	US-10-106-092-7
c	635	15.8	1.0	50	9	US-10-103-002-12
c	636	15.8	1.0	50	9	US-10-103-002-13
c	637	15.8	1.0	50	9	US-09-943-722-20
	638	15.8	1.0	50	10	US-09-227-913-1
c	639	15.8	1.0	50	10	US-09-227-913-3
	640	15.8	1.0	50	10	US-09-896-650A-29
	641	15.6	1.0	25	9	US-09-872-462-440
	642	15.6	1.0	25	9	US-09-872-462-441
	643	15.6	1.0	25	10	US-09-866-108-3139
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c	645	15.6	1.0	25	10	US-09-866-108-4468
	646	15.6	1.0	25	10	US-09-801-042-3
c	647	15.6	1.0	26	8	US-08-900-220C-26
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c	649	15.6	1.0	26	10	US-09-151-999-26
c	650	15.6	1.0	27	7	US-08-834-705-55
c	651	15.6	1.0	27	9	US-10-135-984-3
	652	15.6	1.0	27	10	US-09-870-956-38
	653	15.6	1.0	29	9	US-10-135-984-2
c	654	15.6	1.0	30	9	US-09-976-736-27
c	655	15.6	1.0	30	9	US-09-953-052-9
	656	15.6	1.0	30	9	US-10-113-877-155
	657	15.6	1.0	30	10	US-09-420-433-79
	658	15.6	1.0	31	9	US-09-288-971-5
c	659	15.6	1.0	31	9	US-09-288-971-9
	660	15.6	1.0	31	9	US-09-288-971-13
c	661	15.6	1.0	31	9	US-09-288-971-15
c	662	15.6	1.0	31	9	US-09-912-263-3
	663	15.6	1.0	31	9	US-09-912-263-502
	664	15.6	1.0	31	10	US-09-801-274-158
	665	15.6	1.0	31	10	US-09-801-274-1362
c	666	15.6	1.0	31	10	US-09-801-274-1414
	667	15.6	1.0	31	10	US-09-801-274-1471
c	668	15.6	1.0	31	10	US-09-896-650A-22
	669	15.6	1.0	33	9	US-09-991-209-57
	670	15.6	1.0	33	9	US-09-991-209-67
	671	15.6	1.0	33	10	US-09-840-762A-7
	672	15.6	1.0	33	10	US-09-983-531A-34
c	673	15.6	1.0	34	9	US-10-012-896-901
c	674	15.6	1.0	34	9	US-09-778-900A-24
c	675	15.6	1.0	34	9	US-09-895-793-901
c	676	15.6	1.0	34	9	US-09-895-814-901

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c 679	15.6	1.0	34	10	US-09-822-827-901	Sequence 901, App
c 680	15.6	1.0	35	9	US-09-861-257-100	Sequence 100, App
c 681	15.6	1.0	35	10	US-09-735-705-384	Sequence 384, App
c 682	15.6	1.0	35	10	US-09-850-716A-384	Sequence 384, App
c 683	15.6	1.0	35	10	US-09-897-778-384	Sequence 384, App
c 684	15.6	1.0	36	9	US-09-991-209-62	Sequence 62, Appl
685	15.6	1.0	36	10	US-09-873-676-68	Sequence 68, Appl
686	15.6	1.0	36	10	US-09-974-248-5	Sequence 5, Appli
687	15.6	1.0	37	10	US-09-250-611-105	Sequence 105, App
688	15.6	1.0	38	9	US-10-028-410-4	Sequence 4, Appli
c 689	15.6	1.0	38	9	US-09-825-805-1157	Sequence 1157, Ap
690	15.6	1.0	38	9	US-10-125-635A-370	Sequence 370, App
691	15.6	1.0	38	10	US-09-874-547-69	Sequence 69, Appl
692	15.6	1.0	38	10	US-09-876-527-18	Sequence 18, Appl
c 693	15.6	1.0	39	10	US-09-758-386-4	Sequence 4, Appli
694	15.6	1.0	39	10	US-09-784-990-25	Sequence 25, Appl
695	15.6	1.0	39	10	US-09-179-536B-247	Sequence 247, App
696	15.6	1.0	39	10	US-09-854-799-6	Sequence 6, Appli
697	15.6	1.0	39	10	US-09-469-522-14	Sequence 14, Appl
c 698	15.6	1.0	40	9	US-10-158-684-1	Sequence 1, Appli
c 699	15.6	1.0	40	9	US-10-158-711-1	Sequence 1, Appli
700	15.6	1.0	40	10	US-09-179-536B-248	Sequence 248, App
701	15.6	1.0	40	10	US-09-931-184-6	Sequence 6, Appli
c 702	15.6	1.0	41	10	US-09-238-351-29	Sequence 29, Appl
c 703	15.6	1.0	41	10	US-09-238-351-40	Sequence 40, Appl
704	15.6	1.0	41	10	US-09-179-536B-249	Sequence 249, App
c 705	15.6	1.0	41	10	US-09-858-994-12	Sequence 12, Appl
c 706	15.6	1.0	42	9	US-09-185-904A-29	Sequence 29, Appl
c 707	15.6	1.0	42	9	US-09-887-784-11	Sequence 11, Appl
708	15.6	1.0	42	9	US-09-887-784-12	Sequence 12, Appl
c 709	15.6	1.0	42	10	US-09-811-094-29	Sequence 29, Appl
c 710	15.6	1.0	42	10	US-09-811-094-35	Sequence 35, Appl
c 711	15.6	1.0	42	10	US-09-810-644-29	Sequence 29, Appl
c 712	15.6	1.0	42	10	US-09-810-644-35	Sequence 35, Appl
713	15.6	1.0	42	10	US-09-179-536B-250	Sequence 250, App
c 714	15.6	1.0	43	9	US-09-792-630-48	Sequence 48, Appl
715	15.6	1.0	43	9	US-09-944-160-17	Sequence 17, Appl
c 716	15.6	1.0	43	9	US-10-080-376-48	Sequence 48, Appl
717	15.6	1.0	43	9	US-10-033-297-97	Sequence 97, Appl
c 718	15.6	1.0	43	9	US-09-991-209-80	Sequence 80, Appl
c 719	15.6	1.0	43	9	US-09-953-351-48	Sequence 48, Appl
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721	15.6	1.0	43	10	US-09-179-536B-251	Sequence 251, App
c 722	15.6	1.0	43	10	US-09-027-287-40	Sequence 40, Appl
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724	15.6	1.0	44	9	US-09-905-291A-21	Sequence 21, Appl
c 725	15.6	1.0	44	9	US-09-908-153B-9	Sequence 9, Appli
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727	15.6	1.0	44	9	US-09-907-824-21	Sequence 21, Appl
728	15.6	1.0	44	9	US-09-907-841-21	Sequence 21, Appl
729	15.6	1.0	44	9	US-09-904-011-21	Sequence 21, Appl
730	15.6	1.0	44	9	US-09-749-873-106	Sequence 106, App
731	15.6	1.0	44	9	US-09-906-742-21	Sequence 21, Appl
732	15.6	1.0	44	9	US-09-906-838-21	Sequence 21, Appl
733	15.6	1.0	44	9	US-09-907-613-21	Sequence 21, Appl
734	15.6	1.0	44	9	US-09-907-942-21	Sequence 21, Appl
735	15.6	1.0	44	9	US-09-904-820-21	Sequence 21, Appl
736	15.6	1.0	44	9	US-09-904-859-21	Sequence 21, Appl
737	15.6	1.0	44	9	US-09-909-204-21	Sequence 21, Appl
738	15.6	1.0	44	9	US-09-904-786-21	Sequence 21, Appl
739	15.6	1.0	44	9	US-09-906-646-21	Sequence 21, Appl
740	15.6	1.0	44	9	US-09-906-700-21	Sequence 21, Appl
741	15.6	1.0	44	9	US-09-902-903-21	Sequence 21, Appl
742	15.6	1.0	44	9	US-09-903-749A-21	Sequence 21, Appl
743	15.6	1.0	44	9	US-09-903-786-21	Sequence 21, Appl
744	15.6	1.0	44	10	US-09-179-536B-252	Sequence 252, App
745	15.6	1.0	44	10	US-09-909-320-21	Sequence 21, Appl
746	15.6	1.0	44	10	US-09-909-088B-21	Sequence 21, Appl
c 747	15.6	1.0	45	9	US-09-990-046-22	Sequence 22, Appl
748	15.6	1.0	45	9	US-09-925-922-7	Sequence 7, Appli
749	15.6	1.0	45	9	US-09-293-854-20	Sequence 20, Appl
c 750	15.6	1.0	45	9	US-10-125-751-22	Sequence 22, Appl
c 751	15.6	1.0	45	9	US-10-036-949-47	Sequence 47, Appl
752	15.6	1.0	45	10	US-09-179-536B-253	Sequence 253, App
753	15.6	1.0	45	10	US-09-808-037-10	Sequence 10, Appl
754	15.6	1.0	45	10	US-09-740-668A-72	Sequence 72, Appl
755	15.6	1.0	45	10	US-09-893-615-69	Sequence 69, Appl
c 756	15.6	1.0	45	10	US-09-918-029-22	Sequence 22, Appl
c 757	15.6	1.0	45	10	US-09-900-062-47	Sequence 47, Appl
758	15.6	1.0	45	10	US-09-795-006A-18	Sequence 18, Appl
c 759	15.6	1.0	45	10	US-09-795-006A-38	Sequence 38, Appl
c 760	15.6	1.0	45	12	US-10-038-271-22	Sequence 22, Appl
761	15.6	1.0	46	9	US-09-978-295A-621	Sequence 621, App
762	15.6	1.0	46	9	US-09-978-697-621	Sequence 621, App
763	15.6	1.0	46	9	US-09-978-192A-621	Sequence 621, App
764	15.6	1.0	46	9	US-09-999-832A-621	Sequence 621, App
765	15.6	1.0	46	9	US-09-900-379-67	Sequence 67, Appl
c 766	15.6	1.0	46	9	US-09-900-379-68	Sequence 68, Appl
767	15.6	1.0	46	9	US-09-978-189-621	Sequence 621, App
768	15.6	1.0	46	9	US-09-991-262-14	Sequence 14, Appl
769	15.6	1.0	46	9	US-09-978-608A-621	Sequence 621, App
770	15.6	1.0	46	10	US-09-848-164-67	Sequence 67, Appl
c 771	15.6	1.0	46	10	US-09-848-164-68	Sequence 68, Appl
772	15.6	1.0	46	10	US-09-179-536B-254	Sequence 254, App
773	15.6	1.0	47	9	US-09-978-295A-378	Sequence 378, App
c 774	15.6	1.0	47	9	US-09-853-526-248	Sequence 248, App
775	15.6	1.0	47	9	US-09-978-697-378	Sequence 378, App
776	15.6	1.0	47	9	US-09-978-192A-378	Sequence 378, App
777	15.6	1.0	47	9	US-09-999-832A-378	Sequence 378, App
778	15.6	1.0	47	9	US-09-978-189-378	Sequence 378, App
779	15.6	1.0	47	9	US-09-735-056-24	Sequence 24, Appl
780	15.6	1.0	47	9	US-09-978-608A-378	Sequence 378, App
781	15.6	1.0	47	10	US-09-179-536B-255	Sequence 255, App
782	15.6	1.0	47	10	US-09-785-632A-12	Sequence 12, Appl
c 783	15.6	1.0	47	10	US-09-785-632A-12	Sequence 12, Appl
c 784	15.6	1.0	47	10	US-09-901-484A-248	Sequence 248, App
c 785	15.6	1.0	48	9	US-10-054-444-6	Sequence 6, Appli
786	15.6	1.0	48	9	US-09-864-785-3002	Sequence 3002, Ap
787	15.6	1.0	48	9	US-09-864-785-3224	Sequence 3224, Ap
788	15.6	1.0	48	10	US-09-179-536B-256	Sequence 256, App
789	15.6	1.0	48	10	US-09-880-732-55	Sequence 55, Appl
790	15.6	1.0	49	9	US-09-938-901-13	Sequence 13, Appl
791	15.6	1.0	49	10	US-09-179-536B-257	Sequence 257, App
c 792	15.6	1.0	50	9	US-10-125-751-17	Sequence 17, Appl
793	15.6	1.0	50	9	US-10-066-500-20	Sequence 20, Appl
c 794	15.6	1.0	50	9	US-09-912-552-17	Sequence 17, Appl
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796	15.6	1.0	50	9	US-10-002-796-20	Sequence 20, Appl
797	15.6	1.0	50	9	US-10-066-273-20	Sequence 20, Appl
798	15.6	1.0	50	9	US-10-066-494-20	Sequence 20, Appl
799	15.6	1.0	50	9	US-10-066-269-20	Sequence 20, Appl
800	15.6	1.0	50	9	US-10-066-193-20	Sequence 20, Appl
801	15.6	1.0	50	9	US-10-066-211-20	Sequence 20, Appl
802	15.6	1.0	50	10	US-09-179-536B-258	Sequence 258, App
c 803	15.6	1.0	50	10	US-09-920-171-38	Sequence 38, Appl
c 804	15.6	1.0	50	10	US-09-918-029-17	Sequence 17, Appl
c 805	15.6	1.0	50	10	US-09-920-300A-1257	Sequence 1257, Ap
806	15.6	1.0	50	10	US-09-739-707-7	Sequence 7, Appli
c 807	15.6	1.0	50	12	US-10-033-528-1257	Sequence 1257, Ap
c 808	15.6	1.0	50	12	US-10-038-271-17	Sequence 17, Appl
c 809	15.4	1.0	24	10	US-09-924-256A-4	Sequence 4, Appli
810	15.4	1.0	25	9	US-09-875-440-16	Sequence 16, Appl
c 811	15.4	1.0	25	9	US-09-745-317-57	Sequence 57, Appl
812	15.4	1.0	25	9	US-10-060-756A-2535	Sequence 2535, Ap
813	15.4	1.0	25	9	US-10-060-756A-3039	Sequence 3039, Ap
814	15.4	1.0	25	10	US-09-753-436-12	Sequence 12, Appl
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c 816	15.4	1.0	25	10	US-09-866-108-4884	Sequence 4884, Ap
c 817	15.4	1.0	25	10	US-09-866-108-11962	Sequence 11962, A
c 818	15.4	1.0	25	10	US-09-971-118-5	Sequence 5, Appli
c 819	15.4	1.0	25	10	US-09-895-040A-133	Sequence 133, App
c 820	15.4	1.0	25	10	US-09-895-040A-134	Sequence 134, App
c 821	15.4	1.0	25	10	US-09-895-040A-137	Sequence 137, App
822	15.4	1.0	26	9	US-09-988-462-92	Sequence 92, Appl

c 823	15.4	1.0	26	10	US-09-962-318-18	Sequence 18, Appl
824	15.4	1.0	26	10	US-09-263-959-538	Sequence 538, App
825	15.4	1.0	27	9	US-09-808-880-10	Sequence 10, Appl
c 826	15.4	1.0	27	10	US-09-817-014-170	Sequence 170, App
827	15.4	1.0	28	9	US-10-102-704-11	Sequence 11, Appl
828	15.4	1.0	28	9	US-10-057-951-11	Sequence 11, Appl
829	15.4	1.0	28	10	US-09-084-491A-11	Sequence 11, Appl
c 830	15.4	1.0	29	10	US-09-873-737A-13	Sequence 13, Appl
831	15.4	1.0	31	9	US-09-773-599-15	Sequence 15, Appl
c 832	15.4	1.0	31	9	US-10-023-610-103	Sequence 103, App
c 833	15.4	1.0	31	9	US-09-912-263-154	Sequence 154, App
c 834	15.4	1.0	31	9	US-09-912-263-444	Sequence 444, App
c 835	15.4	1.0	31	9	US-09-779-152-103	Sequence 103, App
836	15.4	1.0	31	10	US-09-817-360-17	Sequence 17, Appl
c 837	15.4	1.0	31	10	US-09-801-274-909	Sequence 909, App
838	15.4	1.0	31	10	US-09-801-274-928	Sequence 928, App
c 839	15.4	1.0	31	10	US-09-801-274-1085	Sequence 1085, Ap
c 840	15.4	1.0	32	10	US-09-910-120-47	Sequence 47, Appl
c 841	15.4	1.0	32	10	US-09-910-120-48	Sequence 48, Appl
c 842	15.4	1.0	32	10	US-09-910-120-52	Sequence 52, Appl
843	15.4	1.0	34	9	US-09-778-900A-24	Sequence 24, Appl
844	15.4	1.0	35	9	US-09-880-464-12	Sequence 12, Appl
845	15.4	1.0	36	9	US-09-738-444A-31	Sequence 31, Appl
846	15.4	1.0	36	10	US-09-504-231A-1703	Sequence 1703, Ap
847	15.4	1.0	36	10	US-09-274-553D-1703	Sequence 1703, Ap
848	15.4	1.0	37	10	US-09-027-287-12	Sequence 12, Appl
849	15.4	1.0	37	10	US-09-027-287-16	Sequence 16, Appl
850	15.4	1.0	37	10	US-09-252-656B-12	Sequence 12, Appl
851	15.4	1.0	37	10	US-09-252-656B-16	Sequence 16, Appl
852	15.4	1.0	38	9	US-09-864-785-830	Sequence 830, App
853	15.4	1.0	38	10	US-09-874-547-68	Sequence 68, Appl
854	15.4	1.0	38	10	US-09-874-547-77	Sequence 77, Appl
c 855	15.4	1.0	39	9	US-10-046-922-74	Sequence 74, Appl
856	15.4	1.0	39	10	US-09-874-547-23	Sequence 23, Appl
857	15.4	1.0	39	10	US-09-865-807-49	Sequence 49, Appl
c 858	15.4	1.0	40	10	US-09-790-417-211	Sequence 211, App
c 859	15.4	1.0	40	10	US-09-752-110A-12	Sequence 12, Appl
860	15.4	1.0	41	9	US-10-201-310-10	Sequence 10, Appl
861	15.4	1.0	42	9	US-09-943-722-96	Sequence 96, Appl
c 862	15.4	1.0	42	10	US-09-211-691-10	Sequence 10, Appl
863	15.4	1.0	42	10	US-09-853-379-9	Sequence 9, Appli
c 864	15.4	1.0	42	10	US-09-971-798-24	Sequence 24, Appl
865	15.4	1.0	43	9	US-09-832-658-13	Sequence 13, Appl
866	15.4	1.0	43	10	US-09-760-574-16	Sequence 16, Appl
867	15.4	1.0	43	10	US-09-855-266A-4	Sequence 4, Appli
c 868	15.4	1.0	44	9	US-09-896-594-3	Sequence 3, Appli
869	15.4	1.0	45	9	US-10-012-896-782	Sequence 782, App
870	15.4	1.0	45	9	US-09-895-793-782	Sequence 782, App
871	15.4	1.0	45	9	US-09-895-814-782	Sequence 782, App
872	15.4	1.0	45	9	US-09-995-847-26	Sequence 26, Appl
c 873	15.4	1.0	45	9	US-10-023-530-17	Sequence 17, Appl
c 874	15.4	1.0	45	9	US-10-211-069-45	Sequence 45, Appl
c 875	15.4	1.0	45	9	US-10-211-069-48	Sequence 48, Appl
c 876	15.4	1.0	45	9	US-10-007-132-15	Sequence 15, Appl
877	15.4	1.0	45	9	US-10-121-746-50	Sequence 50, Appl
878	15.4	1.0	45	9	US-09-977-797A-121	Sequence 121, App
c 879	15.4	1.0	45	10	US-09-742-693-3	Sequence 3, Appli
880	15.4	1.0	45	10	US-09-759-143-782	Sequence 782, App
881	15.4	1.0	45	10	US-09-780-669-782	Sequence 782, App
882	15.4	1.0	45	10	US-09-822-827-782	Sequence 782, App
883	15.4	1.0	46	7	US-08-911-824-115	Sequence 115, App
884	15.4	1.0	46	9	US-09-995-847-25	Sequence 25, Appl
c 885	15.4	1.0	46	9	US-09-900-379-69	Sequence 69, Appl
886	15.4	1.0	46	9	US-09-900-379-70	Sequence 70, Appl
c 887	15.4	1.0	46	10	US-09-848-164-69	Sequence 69, Appl
888	15.4	1.0	46	10	US-09-848-164-70	Sequence 70, Appl
889	15.4	1.0	47	9	US-09-853-526-59	Sequence 59, Appl
c 890	15.4	1.0	47	9	US-10-026-914-4	Sequence 4, Appli
891	15.4	1.0	47	9	US-09-880-464-15	Sequence 15, Appl
c 892	15.4	1.0	47	9	US-09-880-464-15	Sequence 15, Appl
893	15.4	1.0	47	10	US-09-785-632A-6	Sequence 6, Appli
c 894	15.4	1.0	47	10	US-09-785-632A-13	Sequence 13, Appl
895	15.4	1.0	47	10	US-09-901-484A-59	Sequence 59, Appl
c 896	15.4	1.0	47	10	US-09-975-408-56	Sequence 56, Appl
c 897	15.4	1.0	47	12	US-10-075-579-56	Sequence 56, Appl
898	15.4	1.0	49	8	US-08-978-633-10	Sequence 10, Appl
899	15.4	1.0	49	8	US-08-978-634-10	Sequence 10, Appl
900	15.4	1.0	49	8	US-08-978-637-10	Sequence 10, Appl
901	15.4	1.0	49	8	US-08-978-632-10	Sequence 10, Appl
902	15.4	1.0	50	9	US-09-905-291A-151	Sequence 151, App
903	15.4	1.0	50	9	US-09-902-853-151	Sequence 151, App
904	15.4	1.0	50	9	US-09-907-824-151	Sequence 151, App
905	15.4	1.0	50	9	US-09-907-841-151	Sequence 151, App
906	15.4	1.0	50	9	US-09-904-011-151	Sequence 151, App
907	15.4	1.0	50	9	US-09-906-742-151	Sequence 151, App
908	15.4	1.0	50	9	US-09-906-838-151	Sequence 151, App
909	15.4	1.0	50	9	US-09-907-613-151	Sequence 151, App
910	15.4	1.0	50	9	US-09-907-942-151	Sequence 151, App
911	15.4	1.0	50	9	US-09-904-820-151	Sequence 151, App
912	15.4	1.0	50	9	US-09-904-859-151	Sequence 151, App
913	15.4	1.0	50	9	US-09-909-204-151	Sequence 151, App
914	15.4	1.0	50	9	US-09-904-786-151	Sequence 151, App
915	15.4	1.0	50	9	US-09-906-646-151	Sequence 151, App
916	15.4	1.0	50	9	US-09-906-700-151	Sequence 151, App
917	15.4	1.0	50	9	US-09-902-903-151	Sequence 151, App
918	15.4	1.0	50	9	US-09-903-749A-151	Sequence 151, App
919	15.4	1.0	50	9	US-09-903-786-151	Sequence 151, App
920	15.4	1.0	50	10	US-09-179-536B-302	Sequence 302, App
921	15.4	1.0	50	10	US-09-909-320-151	Sequence 151, App
922	15.4	1.0	50	10	US-09-909-088B-151	Sequence 151, App
c 923	15.4	1.0	50	10	US-09-931-087A-11	Sequence 11, Appl
924	15.2	1.0	20	9	US-10-125-181-8	Sequence 8, Appli
925	15.2	1.0	25	10	US-09-866-108-3145	Sequence 3145, Ap
c 926	15.2	1.0	25	10	US-09-866-108-4469	Sequence 4469, Ap
c 927	15.2	1.0	25	10	US-09-866-108-4470	Sequence 4470, Ap
928	15.2	1.0	25	10	US-09-876-221-10	Sequence 10, Appl
c 929	15.2	1.0	29	10	US-09-810-502-30	Sequence 30, Appl
930	15.2	1.0	29	10	US-09-730-857-56	Sequence 56, Appl
c 931	15.2	1.0	29	10	US-09-730-857-57	Sequence 57, Appl
c 932	15.2	1.0	30	9	US-09-953-052-16	Sequence 16, Appl
c 933	15.2	1.0	30	9	US-09-953-052-23	Sequence 23, Appl
c 934	15.2	1.0	30	9	US-09-953-052-72	Sequence 72, Appl
935	15.2	1.0	30	9	US-10-033-297-156	Sequence 156, App
936	15.2	1.0	30	9	US-09-815-981-3	Sequence 3, Appli
937	15.2	1.0	30	9	US-09-940-244-156	Sequence 156, App
938	15.2	1.0	30	10	US-09-062-113-32	Sequence 32, Appl
c 939	15.2	1.0	30	10	US-09-062-113-33	Sequence 33, Appl
c 940	15.2	1.0	30	10	US-09-863-179-7	Sequence 7, Appli
c 941	15.2	1.0	31	9	US-09-773-599-8	Sequence 8, Appli
942	15.2	1.0	31	9	US-10-200-154-10	Sequence 10, Appl
943	15.2	1.0	31	9	US-09-912-263-110	Sequence 110, App
c 944	15.2	1.0	31	9	US-09-912-263-188	Sequence 188, App
945	15.2	1.0	31	9	US-09-912-263-210	Sequence 210, App
946	15.2	1.0	31	9	US-09-912-263-352	Sequence 352, App
947	15.2	1.0	31	9	US-09-912-263-371	Sequence 371, App
948	15.2	1.0	31	9	US-09-912-263-498	Sequence 498, App
949	15.2	1.0	31	10	US-09-801-274-40	Sequence 40, Appl
c 950	15.2	1.0	31	10	US-09-801-274-381	Sequence 381, App
c 951	15.2	1.0	31	10	US-09-801-274-386	Sequence 386, App
952	15.2	1.0	31	10	US-09-801-274-739	Sequence 739, App
c 953	15.2	1.0	31	10	US-09-801-274-1309	Sequence 1309, Ap
954	15.2	1.0	31	10	US-09-801-274-1485	Sequence 1485, Ap
c 955	15.2	1.0	31	10	US-09-801-274-1716	Sequence 1716, Ap
956	15.2	1.0	31	10	US-09-836-077-43	Sequence 43, Appl
957	15.2	1.0	31	10	US-09-954-043-10	Sequence 10, Appl
c 958	15.2	1.0	31	10	US-09-896-650A-7	Sequence 7, Appli
959	15.2	1.0	31	10	US-09-978-752-18	Sequence 18, Appl
960	15.2	1.0	32	9	US-10-066-127-11	Sequence 11, Appl
961	15.2	1.0	32	10	US-09-883-489-5	Sequence 5, Appli
c 962	15.2	1.0	33	8	US-08-913-699-2	Sequence 2, Appli
963	15.2	1.0	33	10	US-09-006-298-14	Sequence 14, Appl
c 964	15.2	1.0	33	10	US-09-736-743A-1	Sequence 1, Appli
c 965	15.2	1.0	33	10	US-09-850-716A-426	Sequence 426, App
c 966	15.2	1.0	33	10	US-09-912-787-15	Sequence 15, Appl
c 967	15.2	1.0	33	10	US-09-897-778-426	Sequence 426, App
c 968	15.2	1.0	33	12	US-10-014-326-1	Sequence 1, Appli

969	15.2	1.0	34	10	US-09-908-805B-55	Sequence 55, Appl
c 970	15.2	1.0	35	9	US-10-020-540A-7	Sequence 7, Appli
c 971	15.2	1.0	35	9	US-09-940-550A-7	Sequence 7, Appli
c 972	15.2	1.0	35	9	US-09-988-462-91	Sequence 91, Appl
c 973	15.2	1.0	35	10	US-09-872-153-27	Sequence 27, Appl
974	15.2	1.0	36	9	US-10-056-414-577	Sequence 577, App
c 975	15.2	1.0	36	9	US-09-927-122-49	Sequence 49, Appl
c 976	15.2	1.0	36	10	US-09-504-231A-2453	Sequence 2453, Ap
c 977	15.2	1.0	36	10	US-09-504-231A-2664	Sequence 2664, Ap
c 978	15.2	1.0	36	10	US-09-274-553D-2453	Sequence 2453, Ap
c 979	15.2	1.0	36	10	US-09-274-553D-2664	Sequence 2664, Ap
c 980	15.2	1.0	36	10	US-09-824-924-2	Sequence 2, Appli
981	15.2	1.0	36	12	US-10-116-288-10	Sequence 10, Appl
c 982	15.2	1.0	37	9	US-09-864-785-1737	Sequence 1737, Ap
c 983	15.2	1.0	37	9	US-09-918-696-43	Sequence 43, Appl
984	15.2	1.0	37	9	US-09-918-696-44	Sequence 44, Appl
c 985	15.2	1.0	37	10	US-09-778-168-16	Sequence 16, Appl
c 986	15.2	1.0	37	10	US-09-778-175-16	Sequence 16, Appl
c 987	15.2	1.0	37	10	US-09-335-218-16	Sequence 16, Appl
988	15.2	1.0	37	10	US-09-179-536B-245	Sequence 245, App
c 989	15.2	1.0	38	9	US-09-864-785-742	Sequence 742, App
990	15.2	1.0	38	9	US-09-864-785-1133	Sequence 1133, Ap
991	15.2	1.0	38	10	US-09-179-536B-246	Sequence 246, App
992	15.2	1.0	38	10	US-09-874-547-75	Sequence 75, Appl
c 993	15.2	1.0	38	10	US-09-870-203A-23	Sequence 23, Appl
994	15.2	1.0	38	10	US-09-870-203A-24	Sequence 24, Appl
c 995	15.2	1.0	39	9	US-09-934-060A-7	Sequence 7, Appli
996	15.2	1.0	39	9	US-10-000-512-24	Sequence 24, Appl
c 997	15.2	1.0	39	9	US-09-977-418-85	Sequence 85, Appl
c 998	15.2	1.0	39	9	US-09-940-244-204	Sequence 204, App
c 999	15.2	1.0	39	9	US-09-940-244-205	Sequence 205, App
c1000	15.2	1.0	39	10	US-09-473-872-30	Sequence 30, Appl

ALIGNMENTS

```
RESULT 1
US-09-782-650-16
; Sequence 16, Application US/09782650
; Patent No. US20020019350A1
; GENERAL INFORMATION:
;  APPLICANT: Levine, Arnold J.
;  APPLICANT:  Mitterer, Artur
;  APPLICANT:  Falkner, Falko-Guenter
;  APPLICANT:  Scheiflinger, Friedrich
;  APPLICANT:  Dorner, Friedrich
;  APPLICANT:  Edwards LifeSciences Corporation
;  TITLE OF INVENTION: Targeted Angiogenesis
;  FILE REFERENCE: 20553D-000611US
;  CURRENT APPLICATION NUMBER: US/09/782,650
;  CURRENT FILING DATE:  2001-02-12
;  PRIOR APPLICATION NUMBER: US 09/324,079
;  PRIOR FILING DATE: 1999-06-01
;  PRIOR APPLICATION NUMBER: US 09/327,045
;  PRIOR FILING DATE: 1999-06-07
;  PRIOR APPLICATION NUMBER: PCT/US00/14988
;  PRIOR FILING DATE: 2000-05-31
;  NUMBER OF SEQ ID NOS: 24
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 16
;   LENGTH: 50
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:annealed
;   OTHER INFORMATION: oligonucleotide
US-09-782-650-16

  Query Match             2.0%;  Score 31.4;  DB 10;  Length 50;
  Best Local Similarity   85.4%;  Pred. No. 1.2e+03;
  Matches   35;  Conservative    0;  Mismatches    6;  Indels    0;  Gaps    0;

Qy   1341 GCGGCGGGGACAGCGGCGGCGGGGACCGCGGGGGCGGCGGC 1381
          ||||||| | |||||||||||| | | |||| |||||||||
Db      7 GCGGCGGCGGCAGCGGCGGCGGCAGCGGCGGCGGCGGC 47


RESULT 2
US-09-883-848A-37/c
; Sequence 37, Application US/09883848A
; Publication No. US20030022819A1
; GENERAL INFORMATION:
;  APPLICANT: Ling, L.
;  APPLICANT:  Sanicola-Nadel, M.
;  TITLE OF INVENTION: ANGIOGENESIS-MODULATING COMPOSITIONS AND USES
;  FILE REFERENCE: CIBT-P01-119
;  CURRENT APPLICATION NUMBER: US/09/883,848A
;  CURRENT FILING DATE:  2001-06-18
;  PRIOR APPLICATION NUMBER: 60/211,919
;  PRIOR FILING DATE: 2000-06-16
;  NUMBER OF SEQ ID NOS: 48
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 37
;   LENGTH: 29
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:
;   OTHER INFORMATION: Oligonucleotide
US-09-883-848A-37

  Query Match             1.4%;  Score 22;  DB 9;  Length 29;
  Best Local Similarity   100.0%;  Pred. No. 6.2e+04;
  Matches   22;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    221 TGCGGACCGGGCAGGGGGTTCG 242
          ||||||||||||||||||||||
Db     22 TGCGGACCGGGCAGGGGGTTCG 1


RESULT 3
US-09-828-034-7/c
; Sequence 7, Application US/09828034
; Patent No. US20020064771A1
; GENERAL INFORMATION:
;  APPLICANT: Zhong, Weidong
;  APPLICANT:  Hong, Zhi
;  APPLICANT:  Ferrari, Eric
;  TITLE OF INVENTION: HCV REPLICASE COMPLEXES
;  FILE REFERENCE: IN01165
;  CURRENT APPLICATION NUMBER: US/09/828,034
;  CURRENT FILING DATE:  2001-04-06
;  PRIOR APPLICATION NUMBER: U.S. 60/195,852
;  PRIOR FILING DATE: 2000-04-06
;  NUMBER OF SEQ ID NOS: 33
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 7
;   LENGTH: 30
;   TYPE: RNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence: Synthetic RNA
US-09-828-034-7

  Query Match             1.4%;  Score 22;  DB 10;  Length 30;
  Best Local Similarity   83.3%;  Pred. No. 6.2e+04;
  Matches   25;  Conservative    0;  Mismatches    5;  Indels    0;  Gaps    0;

Qy   1546 GGGGGCCGGGGGAGGGGCGCGGGAGGGGGC 1575
          |||||| ||||  |||||| ||| |||||||
Db     30 GGGGGCGGGGGCGGGGGCGGGGGCGGGGGC 1


RESULT 4
US-10-006-856A-151
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; Sequence 151, Application US/10006856A
; Publication No. US20030044841A1
; GENERAL INFORMATION:
;  APPLICANT: Baker, Kevin P.
;  APPLICANT:  Botstein, David
;  APPLICANT:  Desnoyers, Luc
;  APPLICANT:  Eaton, Dan l.
;  APPLICANT:  Ferrara, Napoleone
;  APPLICANT:  Fong, Sherman
;  APPLICANT:  Gao, Wei-Qiang
;  APPLICANT:  Goddard, Audrey
;  APPLICANT:  Godowski, Paul J.
;  APPLICANT:  Grimaldi, Christopher J.
;  APPLICANT:  Gurney, Austin L.
;  APPLICANT:  Hillan, Kenneth J.
;  APPLICANT:  Pan, James
;  APPLICANT:  Paoni, Nicholas F.
;  TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
;  TITLE OF INVENTION:  Acids Encoding the Same
;  FILE REFERENCE: P2830P1C14
;  CURRENT APPLICATION NUMBER: US/10/006,856A
;  CURRENT FILING DATE:  2002-05-10
;  NUMBER OF SEQ ID NOS: 477
;  Prior Application removed - See File Wrapper or Palm
; SEQ ID NO 151
;   LENGTH: 45
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-006-856A-151

  Query Match             1.4%;  Score 21.4;  DB 9;  Length 45;
  Best Local Similarity   71.8%;  Pred. No. 8.3e+04;
  Matches   28;  Conservative    0;  Mismatches   11;  Indels    0;  Gaps    0;

Qy    763 GGTGCACCTGGAGCAGGGCGGCACCAAGCTGGTGAAGGA 801
          | |||  | | | || ||| | || || ||||||||||
Db      4 GATGCCACAGTATCAAGGCAGGACAAAACTGGTGAAGGA 42


RESULT 5
US-10-135-984-6
; Sequence 6, Application US/10135984
; Publication No. US20020182595A1
; GENERAL INFORMATION:
;  APPLICANT: Matthew D. Weitzman
;  APPLICANT:  Anton J. Cathomen
;  TITLE OF INVENTION: METHOD OF IDENTIFYING CELLULAR
;  TITLE OF INVENTION:  REGULATORS OF ADENO-ASSOCIATED VIRUS (AAV)
;  FILE REFERENCE: SALKINS.041A
;  CURRENT APPLICATION NUMBER: US/10/135,984
;  CURRENT FILING DATE:  2002-08-05
;  PRIOR APPLICATION NUMBER: 60/286951
;  PRIOR FILING DATE: 2001-04-27
;  NUMBER OF SEQ ID NOS: 8
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 6
;   LENGTH: 45
;   TYPE: DNA
;   ORGANISM: adeno-associated virus
US-10-135-984-6

  Query Match             1.3%;  Score 20.8;  DB 9;  Length 45;
  Best Local Similarity   70.0%;  Pred. No. 1.1e+05;
  Matches   28;  Conservative    0;  Mismatches   12;  Indels    0;  Gaps    0;

Qy      1 GCGAGGCAGCCAGCGAGGGAGAGAGCGAGCGGGCGAGCCG 40
          | |||  ||| |||| |   | |||||||||| ||| || |
Db      5 GTGAGCGAGCGAGCGCGCAGGTGAGCGAGCGAGCGCGCAG 44


RESULT 6
US-10-135-984-4
; Sequence 4, Application US/10135984
; Publication No. US20020182595A1
; GENERAL INFORMATION:
;  APPLICANT: Matthew D. Weitzman
;  APPLICANT:  Anton J. Cathomen
;  TITLE OF INVENTION: METHOD OF IDENTIFYING CELLULAR
;  TITLE OF INVENTION:  REGULATORS OF ADENO-ASSOCIATED VIRUS (AAV)
;  FILE REFERENCE: SALKINS.041A
;  CURRENT APPLICATION NUMBER: US/10/135,984
;  CURRENT FILING DATE:  2002-08-05
;  PRIOR APPLICATION NUMBER: 60/286951
;  PRIOR FILING DATE: 2001-04-27
;  NUMBER OF SEQ ID NOS: 8
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 4
;   LENGTH: 46
;   TYPE: DNA
;   ORGANISM: adeno-associated virus
US-10-135-984-4

  Query Match             1.3%;  Score 20.8;  DB 9;  Length 46;
  Best Local Similarity   70.0%;  Pred. No. 1.1e+05;
  Matches   28;  Conservative    0;  Mismatches   12;  Indels    0;  Gaps    0;

Qy      1 GCGAGGCAGCCAGCGAGGGAGAGAGCGAGCGGGCGAGCCG 40
          | |||  ||| |||| |   | |||||||||| ||| || |
Db      6 GTGAGCGAGCGAGCGCGCAGGTGAGCGAGCGAGCGCGCAG 45


RESULT 7
US-10-135-984-5/c
; Sequence 5, Application US/10135984
; Publication No. US20020182595A1
; GENERAL INFORMATION:
;  APPLICANT: Matthew D. Weitzman
;  APPLICANT:  Anton J. Cathomen
;  TITLE OF INVENTION: METHOD OF IDENTIFYING CELLULAR
;  TITLE OF INVENTION:  REGULATORS OF ADENO-ASSOCIATED VIRUS (AAV)
;  FILE REFERENCE: SALKINS.041A
;  CURRENT APPLICATION NUMBER: US/10/135,984
;  CURRENT FILING DATE:  2002-08-05
;  PRIOR APPLICATION NUMBER: 60/286951
;  PRIOR FILING DATE: 2001-04-27
;  NUMBER OF SEQ ID NOS: 8
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 5
;   LENGTH: 46
;   TYPE: DNA
;   ORGANISM: adeno-associated virus
US-10-135-984-5

  Query Match             1.3%;  Score 20.8;  DB 9;  Length 46;
  Best Local Similarity   70.0%;  Pred. No. 1.1e+05;
  Matches   28;  Conservative    0;  Mismatches   12;  Indels    0;  Gaps    0;

Qy      1 GCGAGGCAGCCAGCGAGGGAGAGAGCGAGCGGGCGAGCCG 40
          | |||  ||| |||| |   | |||||||||| ||| || |
Db     45 GTGAGCGAGCGAGCGCGCAGGTGAGCGAGCGAGCGCGCAG 6


RESULT 8
US-10-135-984-7/c
; Sequence 7, Application US/10135984
; Publication No. US20020182595A1
; GENERAL INFORMATION:
;  APPLICANT: Matthew D. Weitzman
;  APPLICANT:  Anton J. Cathomen
;  TITLE OF INVENTION: METHOD OF IDENTIFYING CELLULAR
;  TITLE OF INVENTION:  REGULATORS OF ADENO-ASSOCIATED VIRUS (AAV)
;  FILE REFERENCE: SALKINS.041A
;  CURRENT APPLICATION NUMBER: US/10/135,984
;  CURRENT FILING DATE:  2002-08-05
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;  PRIOR APPLICATION NUMBER: 60/286951
;  PRIOR FILING DATE: 2001-04-27
;  NUMBER OF SEQ ID NOS: 8
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 7
;   LENGTH: 46
;   TYPE: DNA
;   ORGANISM: adeno-associated virus
US-10-135-984-7

  Query Match             1.3%;  Score 20.8;  DB 9;  Length 46;
  Best Local Similarity   70.0%;  Pred. No. 1.1e+05;
  Matches   28;  Conservative    0;  Mismatches   12;  Indels    0;  Gaps    0;

Qy       1 GCGAGGCAGCCAGCGAGGGAGAGAGCGAGCGGGCGAGCCG 40
           | |||  ||| |||| |   | |||||||| ||| || |
Db      45 GTGAGCGAGCGAGCGCGCAGGTGAGCGAGCGAGCGCGCAG 6


RESULT 9
US-09-888-326-172/c
; Sequence 172, Application US/09888326
; Publication No. US20030026801A1
; GENERAL INFORMATION:
;  APPLICANT: Weiner, George
;  APPLICANT:  Hartmann, Gunther
;  TITLE OF INVENTION: Methods for Enhancing Antibody-Induced
;  TITLE OF INVENTION:  Cell Lysis and Treating Cancer
;  FILE REFERENCE: C1039/7052 (AWS)
;  CURRENT APPLICATION NUMBER: US/09/888,326
;  CURRENT FILING DATE:  2001-06-22
;  PRIOR APPLICATION NUMBER: US 60/213,346
;  PRIOR FILING DATE: 2000-06-22
;  NUMBER OF SEQ ID NOS: 848
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 172
;   LENGTH: 35
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
;   NAME/KEY: misc_feature
;   LOCATION: (0)...(0)
;   OTHER INFORMATION: phosphorothioate backbone
US-09-888-326-172

  Query Match             1.3%;  Score 20.4;  DB 9;  Length 35;
  Best Local Similarity   80.0%;  Pred. No. 1.2e+05;
  Matches   24;  Conservative    0;  Mismatches    6;  Indels    0;  Gaps    0;

Qy    1545 GGGGGGCCGGGGGAGGGGCGCGGGAGGGGG 1574
           ||||||  ||||| |||| | ||| |||||
Db      34 GGGGGGGGGGGGGGGGGGGGGGGGGGGGG 5


RESULT 10
US-10-027-961A-14
; Sequence 14, Application US/10027961A
; Publication No. US20030032789A1
; GENERAL INFORMATION:
;  APPLICANT: O'NEILL, GARY P.
;  APPLICANT:  MANCINI, JOSEPH A.
;  TITLE OF INVENTION: HIGH LEVEL EXPRESSION OF HUMAN
;  TITLE OF INVENTION:  CYCLOOXYGENASE-2
;  FILE REFERENCE: 19029PCADA
;  CURRENT APPLICATION NUMBER: US/10/027,961A
;  CURRENT FILING DATE:  2001-10-25
;  PRIOR APPLICATION NUMBER: 09/599,781
;  PRIOR FILING DATE: 2000-06-21
;  PRIOR APPLICATION NUMBER: 08/930,589
;  PRIOR FILING DATE: 1996-02-22
;  PRIOR APPLICATION NUMBER: PCT/CA94/00501
;  PRIOR FILING DATE: 1999-09-13
;  PRIOR APPLICATION NUMBER: 08/084,033
;  PRIOR FILING DATE: 1993-09-27
;  PRIOR APPLICATION NUMBER: 08/064,271
;  PRIOR FILING DATE: 1993-05-06
;  PRIOR APPLICATION NUMBER: 07/994,760
;  PRIOR FILING DATE: 1992-12-22
;  NUMBER OF SEQ ID NOS: 23
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 14
;   LENGTH: 41
;   TYPE: DNA
;   ORGANISM: Human
US-10-027-961A-14

  Query Match             1.3%;  Score 20.4;  DB 9;  Length 41;
  Best Local Similarity   71.1%;  Pred. No. 1.3e+05;
  Matches   27;  Conservative    0;  Mismatches   11;  Indels    0;  Gaps    0;

Qy     183 TCCTCGTCTCCTCGCTGCTGGTATGCTCGGGACTGGCG 220
           | |||| |  | | |||||| | ||| |||  ||||||
Db       3 TGCTCGCCCGCGCCCTGCTGCTGTGCGCGGTCCTGGCG 40


RESULT 11
US-09-740-002-9
; Sequence 9, Application US/09740002
; Patent No. US20020001798A1
; GENERAL INFORMATION:
;  APPLICANT: BRAMS, PETER
;  APPLICANT:  MORROW, PHILLIP
;  TITLE OF INVENTION: NEUTRALIZING HIGH AFFINITY HUMAN MONOCLONAL ANTIBODIES
;  TITLE OF INVENTION:  SPECIFIC TO RSV F-PROTEIN AND METHODS FOR THEIR
;  TITLE OF INVENTION:  MANUFACTURE AND THERAPEUTIC USE THEREOF
;  FILE REFERENCE: 037003-0275759
;  CURRENT APPLICATION NUMBER: US/09/740,002
;  CURRENT FILING DATE:  2000-12-20
;  PRIOR APPLICATION NUMBER: 09/335,697
;  PRIOR FILING DATE: 1999-06-18
;  PRIOR APPLICATION NUMBER: 08/488,376
;  PRIOR FILING DATE: 1995-06-07
;  NUMBER OF SEQ ID NOS: 27
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 9
;   LENGTH: 49
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence: Primer
US-09-740-002-9

  Query Match             1.3%;  Score 20.4;  DB 10;  Length 49;
  Best Local Similarity   71.1%;  Pred. No. 1.3e+05;
  Matches   27;  Conservative    0;  Mismatches   11;  Indels    0;  Gaps    0;

Qy      19 GAGAGAGCGAGCGGGCGAGCCGGAGCGAGGAAGGGAAA 56
           ||||||| ||| | | ||||| ||   | || | ||||
Db       2 GAGAGAGAGAGAGAGAGCCAGATACACGATGTGAAA 39


RESULT 12
US-10-072-152-32
; Sequence 32, Application US/10072152
; Patent No. US20020142438A1
; GENERAL INFORMATION:
;  APPLICANT: Andersen, Lene N.
;  APPLICANT:  Schulein, Martin
;  APPLICANT:  Lange, Niels E.
;  APPLICANT:  Bjornvad, Mads E.
;  APPLICANT:  Moller, Soren
;  APPLICANT:  Glad, Sanne O. S.
;  APPLICANT:  Kauppinen, Markus S.
;  APPLICANT:  Schnorr, Kirk
;  APPLICANT:  Kongsbak, Lars
```

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;  TITLE OF INVENTION: No. US20020142438A1el Pectate Lyases
;  FILE REFERENCE: 5378.200-US
;  CURRENT APPLICATION NUMBER: US/10/072,152
;  CURRENT FILING DATE:  2002-02-07
;  PRIOR APPLICATION NUMBER: US/09/198,955
;  PRIOR FILING DATE: 1998-11-24
;  PRIOR APPLICATION NUMBER: 1343/97
;  PRIOR FILING DATE: 1997-11-24
;  PRIOR APPLICATION NUMBER: 1344/97
;  PRIOR FILING DATE: 1997-11-24
;  PRIOR APPLICATION NUMBER: 60/067,249
;  PRIOR FILING DATE: 1997-12-02
;  PRIOR APPLICATION NUMBER: 60/067,240
;  PRIOR FILING DATE: 1997-12-02
;  PRIOR APPLICATION NUMBER: 09/073,684
;  PRIOR FILING DATE: 1998-05-06
;  PRIOR APPLICATION NUMBER: 09/184,217
;  PRIOR FILING DATE: 1998-11-02
;  NUMBER OF SEQ ID NOS: 32
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 32
;   LENGTH: 48
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Primer
US-10-072-152-32

  Query Match             1.3%;  Score 20.2;  DB 12;  Length 48;
  Best Local Similarity   68.3%;  Pred. No. 1.4e+05;
  Matches   28;  Conservative    0;  Mismatches   13;  Indels    0;  Gaps    0;

Qy    1451 TGGTACTCGCAGCTGCTCTACCAAATAGGCACCTGGCTCCT 1491
           ||  || ||| || ||| ||||| |  | |||| || || |
Db       5 TGAGACGCGCGGCCGCTATACCACACTGCCACCGGGTTCTT 45


RESULT 13
US-09-992-598-122
; Sequence 122, Application US/09992598
; Patent No. US20020160384A1
; GENERAL INFORMATION:
;  APPLICANT: Ashkenazi,Avi J.
;  APPLICANT:  Baker,Kevin P.
;  APPLICANT:  Botstein,David
;  APPLICANT:  Desnoyers,Luc
;  APPLICANT:  Eaton,Dan L.
;  APPLICANT:  Ferrara,Napoleone
;  APPLICANT:  Fong,Sherman
;  APPLICANT:  Gerber,Hanspeter
;  APPLICANT:  Gerritsen,Mary E.
;  APPLICANT:  Goddard,Audrey
;  APPLICANT:  Godowski,Paul J.
;  APPLICANT:  Grimaldi,J.Christopher
;  APPLICANT:  Gurney,Austin L.
;  APPLICANT:  Kljavin,Ivar J.
;  APPLICANT:  Napier,Mary A.
;  APPLICANT:  Pan,James
;  APPLICANT:  Paoni,Nicholas F.
;  APPLICANT:  Roy, Margaret Ann
;  APPLICANT:  Stewart, Timothy A.
;  APPLICANT:  Tumas, Daniel
;  APPLICANT:  Watanabe, Colin K.
;  APPLICANT:  Williams, P. Mickey
;  APPLICANT:  Wood, William I.
;  APPLICANT:  Zhang, Zemin
;  TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
;  TITLE OF INVENTION:  Acids Encoding the Same
;  FILE REFERENCE: P2730P1C20
;  CURRENT APPLICATION NUMBER: US/09/992,598
;  CURRENT FILING DATE:  2001-11-14
;  PRIOR APPLICATION NUMBER: 60/049787
;  PRIOR FILING DATE: 1997-06-16
;  PRIOR APPLICATION NUMBER: 60/062250
;  PRIOR FILING DATE: 1997-10-17
;  PRIOR APPLICATION NUMBER: 60/065186
;  PRIOR FILING DATE: 1997-11-12
;  PRIOR APPLICATION NUMBER: 60/065311
;  PRIOR FILING DATE: 1997-11-13
;  PRIOR APPLICATION NUMBER: 60/066770
;  PRIOR FILING DATE: 1997-11-24
;  PRIOR APPLICATION NUMBER: 60/075945
;  PRIOR FILING DATE: 1998-02-25
;  PRIOR APPLICATION NUMBER: 60/078910
;  PRIOR FILING DATE: 1998-03-20
;  PRIOR APPLICATION NUMBER: 60/083322
;  PRIOR FILING DATE: 1998-04-28
;  PRIOR APPLICATION NUMBER: 60/084600
;  PRIOR FILING DATE: 1998-05-07
;  PRIOR APPLICATION NUMBER: 60/087106
;  PRIOR FILING DATE: 1998-05-28
;  PRIOR APPLICATION NUMBER: 60/087607
;  PRIOR FILING DATE: 1998-06-02
;  PRIOR APPLICATION NUMBER: 60/087609
;  PRIOR FILING DATE: 1998-06-02
;  PRIOR APPLICATION NUMBER: 60/087759
;  PRIOR FILING DATE: 1998-06-02
;  PRIOR APPLICATION NUMBER: 60/087827
;  PRIOR FILING DATE: 1998-06-03
;  PRIOR APPLICATION NUMBER: 60/088021
;  PRIOR FILING DATE: 1998-06-04
;  PRIOR APPLICATION NUMBER: 60/088025
;  PRIOR FILING DATE: 1998-06-04
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;  PRIOR APPLICATION NUMBER: 60/088033
;  PRIOR FILING DATE: 1998-06-04
;  PRIOR APPLICATION NUMBER: 60/088326
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;  PRIOR APPLICATION NUMBER: 60/088167
;  PRIOR FILING DATE: 1998-06-05
;  PRIOR APPLICATION NUMBER: 60/088202
;  PRIOR FILING DATE: 1998-06-05
;  PRIOR APPLICATION NUMBER: 60/088212
;  PRIOR FILING DATE: 1998-06-05
;  PRIOR APPLICATION NUMBER: 60/088217
;  PRIOR FILING DATE: 1998-06-05
;  PRIOR APPLICATION NUMBER: 60/088655
;  PRIOR FILING DATE: 1998-06-09
;  PRIOR APPLICATION NUMBER: 60/088734
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;  PRIOR FILING DATE: 1998-06-10
;  PRIOR APPLICATION NUMBER: 60/088826
;  PRIOR FILING DATE: 1998-06-10
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;  PRIOR FILING DATE: 1998-06-11
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;  PRIOR FILING DATE: 1998-06-11
;  PRIOR APPLICATION NUMBER: 60/088876
;  PRIOR FILING DATE: 1998-06-11
;  PRIOR APPLICATION NUMBER: 60/089105
;  PRIOR FILING DATE: 1998-06-12
;  PRIOR APPLICATION NUMBER: 60/089440
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; PRIOR FILING DATE: 1998-06-16
; PRIOR APPLICATION NUMBER: 60/089512
; PRIOR FILING DATE: 1998-06-16
; PRIOR APPLICATION NUMBER: 60/089514
; PRIOR FILING DATE: 1998-06-16
; PRIOR APPLICATION NUMBER: 60/089532
; PRIOR FILING DATE: 1998-06-17
; PRIOR APPLICATION NUMBER: 60/089538
; PRIOR FILING DATE: 1998-06-17
; PRIOR APPLICATION NUMBER: 60/089598
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; PRIOR APPLICATION NUMBER: 60/089599
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; PRIOR FILING DATE: 1998-06-17
; PRIOR APPLICATION NUMBER: 60/089653
; PRIOR FILING DATE: 1998-06-17
; PRIOR APPLICATION NUMBER: 60/089801
; PRIOR FILING DATE: 1998-06-18
; PRIOR APPLICATION NUMBER: 60/089907
; PRIOR FILING DATE: 1998-06-18
; PRIOR APPLICATION NUMBER: 60/089908
; PRIOR FILING DATE: 1998-06-18
; PRIOR APPLICATION NUMBER: 60/089947
; PRIOR FILING DATE: 1998-06-19
; PRIOR APPLICATION NUMBER: 60/089948
; PRIOR FILING DATE: 1998-06-19
; PRIOR APPLICATION NUMBER: 60/089952
; PRIOR FILING DATE: 1998-06-19
; PRIOR APPLICATION NUMBER: 60/090246
; PRIOR FILING DATE: 1998-06-22
; PRIOR APPLICATION NUMBER: 60/090252
; PRIOR FILING DATE: 1998-06-22
; PRIOR APPLICATION NUMBER: 60/090254
; PRIOR FILING DATE: 1998-06-22
; PRIOR APPLICATION NUMBER: 60/090349
; PRIOR FILING DATE: 1998-06-23
; PRIOR APPLICATION NUMBER: 60/090355
; PRIOR FILING DATE: 1998-06-23
; PRIOR APPLICATION NUMBER: 60/090429
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090431
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090435
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090444
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090445
; PRIOR FILING DATE: 1998-06-24
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; PRIOR FILING DATE: 1998-06-24
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; PRIOR APPLICATION NUMBER: 60/090678
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; PRIOR FILING DATE: 1998-06-25
; PRIOR APPLICATION NUMBER: 60/090694
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; PRIOR FILING DATE: 1998-06-25
; PRIOR APPLICATION NUMBER: 60/090862
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; PRIOR APPLICATION NUMBER: 60/090863
; PRIOR FILING DATE: 1998-06-26
; PRIOR APPLICATION NUMBER: 60/091360
; PRIOR FILING DATE: 1998-07-01
; PRIOR APPLICATION NUMBER: 60/091478
; PRIOR FILING DATE: 1998-07-02
; PRIOR APPLICATION NUMBER: 60/091544
; PRIOR FILING DATE: 1998-07-01
; PRIOR APPLICATION NUMBER: 60/091519
; PRIOR FILING DATE: 1998-07-02
; PRIOR APPLICATION NUMBER: 60/091626
; PRIOR FILING DATE: 1998-07-02
; PRIOR APPLICATION NUMBER: 60/091633
; PRIOR FILING DATE: 1998-07-02
; PRIOR APPLICATION NUMBER: 60/091978
; PRIOR FILING DATE: 1998-07-07
; PRIOR APPLICATION NUMBER: 60/091982
; PRIOR FILING DATE: 1998-07-07
; PRIOR APPLICATION NUMBER: 60/092182
; PRIOR FILING DATE: 1998-07-09

Query Match 1.3%; Score 20; DB 9; Length 45;
Best Local Similarity 65.9%; Pred. No. 1.5e+05;
Matches 29; Conservative 0; Mismatches 15; Indels 0; Gaps 0;

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Qy   1400 GCTCCAGGTGCTGCCGACGCTCCGGGTGCGGGGGCCACCGCGGG 1443
          ||| |   |||||||| |||| | | || |||     |||| ||
Db      2 GCTGCTCCTGCTGCCGCCGCTGCTGCTGGGGGCCTTCCCGCCGG 45
```

RESULT 14
US-09-989-293A-122
; Sequence 122, Application US/09989293A
; Patent No. US20020177164A1
; GENERAL INFORMATION:
; APPLICANT: Ashkenazi,Avi J.
; APPLICANT: Baker,Kevin P.
; APPLICANT: Botstein,David
; APPLICANT: Desnoyers,Luc
; APPLICANT: Eaton,Dan L.
; APPLICANT: Ferrara,Napoleone ;
; APPLICANT: Fong,Sherman
; APPLICANT: Gerber,Hanspeter
; APPLICANT: Gerritsen,Mary E.
; APPLICANT: Goddard,Audrey
; APPLICANT: Godowski,Paul J.
; APPLICANT: Grimaldi,J.Christopher
; APPLICANT: Gurney,Austin L.
; APPLICANT: Kljavin,Ivar J.
; APPLICANT: Napier,Mary A.
; APPLICANT: Pan,James
; APPLICANT: Paoni,Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K.
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: P2730P1C66
; CURRENT APPLICATION NUMBER: US/09/989,293A
; CURRENT FILING DATE: 2001-11-20
; PRIOR APPLICATION NUMBER: 60/049787
; PRIOR FILING DATE: 1997-06-16
; PRIOR APPLICATION NUMBER: 60/062250
; PRIOR FILING DATE: 1997-10-17
; PRIOR APPLICATION NUMBER: 60/065186
; PRIOR FILING DATE: 1997-11-12
; PRIOR APPLICATION NUMBER: 60/065311
; PRIOR FILING DATE: 1997-11-13
; PRIOR APPLICATION NUMBER: 60/066770

; PRIOR FILING DATE: 1997-11-24
; PRIOR APPLICATION NUMBER: 60/075945
; PRIOR FILING DATE: 1998-02-25
; PRIOR APPLICATION NUMBER: 60/078910
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: 60/083322
; PRIOR FILING DATE: 1998-04-28
; PRIOR APPLICATION NUMBER: 60/084600
; PRIOR FILING DATE: 1998-05-07
; PRIOR APPLICATION NUMBER: 60/087106
; PRIOR FILING DATE: 1998-05-28
; PRIOR APPLICATION NUMBER: 60/087607
; PRIOR FILING DATE: 1998-06-02
; PRIOR APPLICATION NUMBER: 60/087609
; PRIOR FILING DATE: 1998-06-02
; PRIOR APPLICATION NUMBER: 60/087759
; PRIOR FILING DATE: 1998-06-02
; PRIOR APPLICATION NUMBER: 60/087827
; PRIOR FILING DATE: 1998-06-03
; PRIOR APPLICATION NUMBER: 60/088021
; PRIOR FILING DATE: 1998-06-04
; PRIOR APPLICATION NUMBER: 60/088025
; PRIOR FILING DATE: 1998-06-04
; PRIOR APPLICATION NUMBER: 60/088026
; PRIOR FILING DATE: 1998-06-04
; PRIOR APPLICATION NUMBER: 60/088028
; PRIOR FILING DATE: 1998-06-04
; PRIOR APPLICATION NUMBER: 60/088029
; PRIOR FILING DATE: 1998-06-04
; PRIOR APPLICATION NUMBER: 60/088030
; PRIOR FILING DATE: 1998-06-04
; PRIOR APPLICATION NUMBER: 60/088033
; PRIOR FILING DATE: 1998-06-04
; PRIOR APPLICATION NUMBER: 60/088326
; PRIOR FILING DATE: 1998-06-04
; PRIOR APPLICATION NUMBER: 60/088167
; PRIOR FILING DATE: 1998-06-05
; PRIOR APPLICATION NUMBER: 60/088202
; PRIOR FILING DATE: 1998-06-05
; PRIOR APPLICATION NUMBER: 60/088212
; PRIOR FILING DATE: 1998-06-05
; PRIOR APPLICATION NUMBER: 60/088217
; PRIOR FILING DATE: 1998-06-05
; PRIOR APPLICATION NUMBER: 60/088655
; PRIOR FILING DATE: 1998-06-09
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; PRIOR FILING DATE: 1998-06-10
; PRIOR APPLICATION NUMBER: 60/088738
; PRIOR FILING DATE: 1998-06-10
; PRIOR APPLICATION NUMBER: 60/088742
; PRIOR FILING DATE: 1998-06-10
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; PRIOR APPLICATION NUMBER: 60/088826
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; PRIOR APPLICATION NUMBER: 60/088858
; PRIOR FILING DATE: 1998-06-11
; PRIOR APPLICATION NUMBER: 60/088861
; PRIOR FILING DATE: 1998-06-11
; PRIOR APPLICATION NUMBER: 60/088876
; PRIOR FILING DATE: 1998-06-11
; PRIOR APPLICATION NUMBER: 60/089105
; PRIOR FILING DATE: 1998-06-12
; PRIOR APPLICATION NUMBER: 60/089440
; PRIOR FILING DATE: 1998-06-16
; PRIOR APPLICATION NUMBER: 60/089512
; PRIOR FILING DATE: 1998-06-16
; PRIOR APPLICATION NUMBER: 60/089514
; PRIOR FILING DATE: 1998-06-16
; PRIOR APPLICATION NUMBER: 60/089532
; PRIOR FILING DATE: 1998-06-17
; PRIOR APPLICATION NUMBER: 60/089538
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; PRIOR APPLICATION NUMBER: 60/089598
; PRIOR FILING DATE: 1998-06-17
; PRIOR APPLICATION NUMBER: 60/089599
; PRIOR FILING DATE: 1998-06-17
; PRIOR APPLICATION NUMBER: 60/089600
; PRIOR FILING DATE: 1998-06-17
; PRIOR APPLICATION NUMBER: 60/089653
; PRIOR FILING DATE: 1998-06-17
; PRIOR APPLICATION NUMBER: 60/089801
; PRIOR FILING DATE: 1998-06-18
; PRIOR APPLICATION NUMBER: 60/089907
; PRIOR FILING DATE: 1998-06-18
; PRIOR APPLICATION NUMBER: 60/089908
; PRIOR FILING DATE: 1998-06-18
; PRIOR APPLICATION NUMBER: 60/089947
; PRIOR FILING DATE: 1998-06-19
; PRIOR APPLICATION NUMBER: 60/089948
; PRIOR FILING DATE: 1998-06-19
; PRIOR APPLICATION NUMBER: 60/089952
; PRIOR FILING DATE: 1998-06-19
; PRIOR APPLICATION NUMBER: 60/090246
; PRIOR FILING DATE: 1998-06-22
; PRIOR APPLICATION NUMBER: 60/090252
; PRIOR FILING DATE: 1998-06-22
; PRIOR APPLICATION NUMBER: 60/090254
; PRIOR FILING DATE: 1998-06-22
; PRIOR APPLICATION NUMBER: 60/090349
; PRIOR FILING DATE: 1998-06-23
; PRIOR APPLICATION NUMBER: 60/090355
; PRIOR FILING DATE: 1998-06-23
; PRIOR APPLICATION NUMBER: 60/090429
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090431
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090435
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090444
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; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090535
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090540
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090542
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090557
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090676
; PRIOR FILING DATE: 1998-06-25
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; PRIOR FILING DATE: 1998-07-07
; PRIOR APPLICATION NUMBER: 60/091982
; PRIOR FILING DATE: 1998-07-07
; PRIOR APPLICATION NUMBER: 60/092182
; PRIOR FILING DATE: 1998-07-09

Query Match 1.3%; Score 20; DB 9; Length 45;
Best Local Similarity 65.9%; Pred. No. 1.5e+05;
Matches 29; Conservative 0; Mismatches 15; Indels 0; Gaps 0;

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RESULT 15
US-09-989-735-122
; Sequence 122, Application US/09989735
; Publication No. US20020193299A1
; GENERAL INFORMATION:
; APPLICANT: Ashkenazi,Avi J.
; APPLICANT: Baker,Kevin P.
; APPLICANT: Botstein,David
; APPLICANT: Desnoyers,Luc
; APPLICANT: Eaton,Dan L.
; APPLICANT: Ferrara,Napoleone
; APPLICANT: Fong,Sherman
; APPLICANT: Gerber,Hanspeter
; APPLICANT: Gerritsen,Mary E.
; APPLICANT: Goddard,Audrey
; APPLICANT: Godowski,Paul J.
; APPLICANT: Grimaldi,J.Christopher
; APPLICANT: Gurney,Austin L.
; APPLICANT: Kljavin,Ivar J.
; APPLICANT: Napier,Mary A.
; APPLICANT: Pan,James
; APPLICANT: Paoni,Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K.
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: P2730P1C61
; CURRENT APPLICATION NUMBER: US/09/989,735
; CURRENT FILING DATE: 2001-11-19
; PRIOR APPLICATION NUMBER: 60/049787
; PRIOR FILING DATE: 1997-06-16
; PRIOR APPLICATION NUMBER: 60/062250
; PRIOR FILING DATE: 1997-10-17
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; PRIOR FILING DATE: 1998-07-07
; PRIOR APPLICATION NUMBER: 60/092182
; PRIOR FILING DATE: 1998-07-09

Query Match 1.3%; Score 20; DB 9; Length 45;
Best Local Similarity 65.9%; Pred. No. 1.5e+05;
Matches 29; Conservative 0; Mismatches 15; Indels 0; Gaps 0;

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RESULT 16
US-09-990-444-122
; Sequence 122, Application US/09990444
; Publication No. US20020193300A1
; GENERAL INFORMATION:
; APPLICANT: Ashkenazi,Avi J.
; APPLICANT: Baker,Kevin P.
; APPLICANT: Botstein,David
; APPLICANT: Desnoyers,Luc
; APPLICANT: Eaton,Dan L.
; APPLICANT: Ferrara,Napoleone
; APPLICANT: Fong,Sherman
; APPLICANT: Gerber,Hanspeter
; APPLICANT: Gerritsen,Mary E.
; APPLICANT: Goddard,Audrey
; APPLICANT: Godowski,Paul J.
; APPLICANT: Grimaldi,J.Christopher
; APPLICANT: Gurney,Austin L.
; APPLICANT: Kljavin,Ivar J.
; APPLICANT: Napier,Mary A.
; APPLICANT: Pan,James
; APPLICANT: Paoni,Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K.
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: P2730P1C19
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; PRIOR APPLICATION NUMBER: 60/091978
; PRIOR FILING DATE: 1998-07-07
; PRIOR APPLICATION NUMBER: 60/091982
; PRIOR FILING DATE: 1998-07-07
; PRIOR APPLICATION NUMBER: 60/092182
; PRIOR FILING DATE: 1998-07-09

Query Match 1.3%; Score 20; DB 9; Length 45;
Best Local Similarity 65.9%; Pred. No. 1.5e+05;
Matches 29; Conservative 0; Mismatches 15; Indels 0; Gaps 0;

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Qy   1400 GCTCCAGGTGCTGCCGACGCTCCGGGTGCGGGGGCCACCGCGGG 1443
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Db      2 GCTGCTCCTGCTGCCGCCGCTGCTGCTGGGGGCCTTCCCGCCGG 45
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RESULT 17
US-09-989-730-122
; Sequence 122, Application US/09989730
; Publication No. US20020197674A1
; GENERAL INFORMATION:
; APPLICANT: Ashkenazi,Avi J.
; APPLICANT: Baker,Kevin P.
; APPLICANT: Botstein,David
; APPLICANT: Desnoyers,Luc
; APPLICANT: Eaton,Dan L.
; APPLICANT: Ferrara,Napoleone
; APPLICANT: Fong,Sherman
; APPLICANT: Gerber,Hanspeter
; APPLICANT: Gerritsen,Mary E.
; APPLICANT: Goddard,Audrey
; APPLICANT: Godowski,Paul J.
; APPLICANT: Grimaldi,J.Christopher
; APPLICANT: Gurney,Austin L.
; APPLICANT: Kljavin,Ivar J.
; APPLICANT: Napier,Mary A.
; APPLICANT: Pan,James
; APPLICANT: Paoni,Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K.
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: P2730P1C69
; CURRENT APPLICATION NUMBER: US/09/989,730
; CURRENT FILING DATE: 2001-11-20
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; PRIOR APPLICATION NUMBER: 60/089952

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; PRIOR FILING DATE: 1998-07-07
; PRIOR APPLICATION NUMBER: 60/092182
; PRIOR FILING DATE: 1998-07-09

Query Match 1.3%; Score 20; DB 9; Length 45;
Best Local Similarity 65.9%; Pred. No. 1.5e+05;
Matches 29; Conservative 0; Mismatches 15; Indels 0; Gaps 0;

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RESULT 18
US-09-990-436-122
; Sequence 122, Application US/09990436
; Publication No. US20020198148A1
; GENERAL INFORMATION:
; APPLICANT: Ashkenazi,Avi J.
; APPLICANT: Baker,Kevin P.
; APPLICANT: Botstein,David
; APPLICANT: Desnoyers,Luc
; APPLICANT: Eaton,Dan L.
; APPLICANT: Ferrara,Napoleone
; APPLICANT: Fong,Sherman
; APPLICANT: Gerber,Hanspeter
; APPLICANT: Gerritsen,Mary E.
; APPLICANT: Goddard,Audrey
; APPLICANT: Godowski,Paul J.
; APPLICANT: Grimaldi,J.Christopher
; APPLICANT: Gurney,Austin L.
; APPLICANT: Kljavin,Ivar J.
; APPLICANT: Napier,Mary A.
; APPLICANT: Pan,James
; APPLICANT: Paoni,Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K.
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: P2730P1C14
; CURRENT APPLICATION NUMBER: US/09/990,436
; CURRENT FILING DATE: 2001-11-14
; PRIOR APPLICATION NUMBER: 60/049787
; PRIOR FILING DATE: 1997-06-16
; PRIOR APPLICATION NUMBER: 60/062250
; PRIOR FILING DATE: 1997-10-17
; PRIOR APPLICATION NUMBER: 60/065186
; PRIOR FILING DATE: 1997-11-12
; PRIOR APPLICATION NUMBER: 60/065311
; PRIOR FILING DATE: 1997-11-13
; PRIOR APPLICATION NUMBER: 60/066770
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; PRIOR APPLICATION NUMBER: 60/075945
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; PRIOR FILING DATE: 1998-07-07
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; PRIOR FILING DATE: 1998-07-09

Query Match 1.3%; Score 20; DB 9; Length 45;
Best Local Similarity 65.9%; Pred. No. 1.5e+05;
Matches 29; Conservative 0; Mismatches 15; Indels 0; Gaps 0;

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RESULT 19
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; Publication No. US20020197615A1
; GENERAL INFORMATION:

; APPLICANT: Ashkenazi,Avi J.
; APPLICANT: Baker,Kevin P.
; APPLICANT: Botstein,David
; APPLICANT: Desnoyers,Luc
; APPLICANT: Eaton,Dan L.
; APPLICANT: Ferrara,Napoleone
; APPLICANT: Fong,Sherman
; APPLICANT: Gerber,Hanspeter
; APPLICANT: Gerritsen,Mary E.
; APPLICANT: Goddard,Audrey
; APPLICANT: Godowski,Paul J.
; APPLICANT: Grimaldi,J.Christopher
; APPLICANT: Gurney,Austin L.
; APPLICANT: Kljavin,Ivar J.
; APPLICANT: Napier,Mary A.
; APPLICANT: Pan,James
; APPLICANT: Paoni,Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K.
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: P2730P1C53
; CURRENT APPLICATION NUMBER: US/09/991,181
; CURRENT FILING DATE: 2001-11-16
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; PRIOR FILING DATE: 1998-06-26
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; PRIOR FILING DATE: 1998-07-01
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; PRIOR FILING DATE: 1998-07-02
; PRIOR APPLICATION NUMBER: 60/091633
; PRIOR FILING DATE: 1998-07-02
; PRIOR APPLICATION NUMBER: 60/091978
; PRIOR FILING DATE: 1998-07-07
; PRIOR APPLICATION NUMBER: 60/091982
; PRIOR FILING DATE: 1998-07-07
; PRIOR APPLICATION NUMBER: 60/092182
; PRIOR FILING DATE: 1998-07-09

Query Match 1.3%; Score 20; DB 9; Length 45;
Best Local Similarity 65.9%; Pred. No. 1.5e+05;
Matches 29; Conservative 0; Mismatches 15; Indels 0; Gaps 0;

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Db      2 GCTGCTCCTGCTGCCGCCGCTGCTGCTGGGGGCCTTCCCGCCGG 45
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RESULT 20
US-09-993-687-122
; Sequence 122, Application US/09993687
; Publication No. US20020198149A1
; GENERAL INFORMATION:
; APPLICANT: Ashkenazi,Avi J.
; APPLICANT: Baker,Kevin P.
; APPLICANT: Botstein,David
; APPLICANT: Desnoyers,Luc
; APPLICANT: Eaton,Dan L.
; APPLICANT: Ferrara,Napoleone
; APPLICANT: Fong,Sherman
; APPLICANT: Gerber,Hanspeter
; APPLICANT: Gerritsen,Mary E.
; APPLICANT: Goddard,Audrey
; APPLICANT: Godowski,Paul J.
; APPLICANT: Grimaldi,J.Christopher
; APPLICANT: Gurney,Austin L.
; APPLICANT: Kljavin,Ivar J.
; APPLICANT: Napier,Mary A.
; APPLICANT: Pan,James
; APPLICANT: Paoni,Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K.
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: P2730P1C11
; CURRENT APPLICATION NUMBER: US/09/993,687
; CURRENT FILING DATE: 2002-11-14
; PRIOR APPLICATION NUMBER: 60/049787
; PRIOR FILING DATE: 1997-06-16
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; PRIOR APPLICATION NUMBER: 60/092182
; PRIOR FILING DATE: 1998-07-09

Query Match 1.3%; Score 20; DB 9; Length 45;
Best Local Similarity 65.9%; Pred. No. 1.5e+05;
Matches 29; Conservative 0; Mismatches 15; Indels 0; Gaps 0;

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RESULT 21
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; Sequence 122, Application US/09989734
; Publication No. US20030003531A1
; GENERAL INFORMATION:
; APPLICANT: Ashkenazi,Avi J.
; APPLICANT: Baker,Kevin P.
; APPLICANT: Botstein,David
; APPLICANT: Desnoyers,Luc
; APPLICANT: Eaton,Dan L.
; APPLICANT: Ferrara,Napoleone
; APPLICANT: Fong,Sherman
; APPLICANT: Gerber,Hanspeter
; APPLICANT: Gerritsen,Mary E.
; APPLICANT: Goddard,Audrey
; APPLICANT: Godowski,Paul J.
; APPLICANT: Grimaldi,J.Christopher
; APPLICANT: Gurney,Austin L.
; APPLICANT: Kljavin,Ivar J.

; APPLICANT: Napier,Mary A.
; APPLICANT: Pan,James
; APPLICANT: Paoni,Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K.
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: P2730P1C64
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; PRIOR FILING DATE: 1998-07-09

Query Match 1.3%; Score 20; DB 9; Length 45;
Best Local Similarity 65.9%; Pred. No. 1.5e+05;
Matches 29; Conservative 0; Mismatches 15; Indels 0; Gaps 0;

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; Publication No. US20030008297A1
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; APPLICANT: Ashkenazi,Avi J.
; APPLICANT: Baker,Kevin P.
; APPLICANT: Botstein,David
; APPLICANT: Desnoyers,Luc
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; APPLICANT: Ferrara,Napoleone
; APPLICANT: Fong,Sherman
; APPLICANT: Gerber,Hanspeter
; APPLICANT: Gerritsen,Mary E.
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; APPLICANT: Godowski,Paul J.
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; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K.
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
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; PRIOR FILING DATE: 1998-07-09

Query Match 1.3%; Score 20; DB 9; Length 45;
Best Local Similarity 65.9%; Pred. No. 1.5e+05;
Matches 29; Conservative 0; Mismatches 15; Indels 0; Gaps 0;

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Qy    1400 GCTCCAGGTGCTGCCGACGCTCCGGGTGCGGGGGCCACCGCGGG 1443
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Db       2 GCTGCTCCTGCTGCCGCCGCTGCTGCTGGGGGCCTTCCCGCCGG 45
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RESULT 23
US-09-993-667-122
; Sequence 122, Application US/09993667
; Publication No. US20030022187A1
; GENERAL INFORMATION:
; APPLICANT: Ashkenazi,Avi J.
; APPLICANT: Baker,Kevin P.
; APPLICANT: Botstein,David
; APPLICANT: Desnoyers,Luc
; APPLICANT: Eaton,Dan L.
; APPLICANT: Ferrara,Napoleone
; APPLICANT: Fong,Sherman
; APPLICANT: Gerber,Hanspeter
; APPLICANT: Gerritsen,Mary E.
; APPLICANT: Goddard,Audrey
; APPLICANT: Godowski,Paul J.
; APPLICANT: Grimaldi,J.Christopher
; APPLICANT: Gurney,Austin L.
; APPLICANT: Kljavin,Ivar J.
; APPLICANT: Napier,Mary A.
; APPLICANT: Pan,James
; APPLICANT: Paoni,Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K.
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: P2730P1C4
; CURRENT APPLICATION NUMBER: US/09/993,667

; CURRENT FILING DATE: 2001-11-14
; PRIOR APPLICATION NUMBER: 60/049787
; PRIOR FILING DATE: 1997-06-16
; PRIOR APPLICATION NUMBER: 60/062250
; PRIOR FILING DATE: 1997-10-17
; PRIOR APPLICATION NUMBER: 60/065186
; PRIOR FILING DATE: 1997-11-12
; PRIOR APPLICATION NUMBER: 60/065311
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;  PRIOR APPLICATION NUMBER: 60/090862
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;  PRIOR FILING DATE: 1998-07-02
;  PRIOR APPLICATION NUMBER: 60/091978
;  PRIOR FILING DATE: 1998-07-07
;  PRIOR APPLICATION NUMBER: 60/091982
;  PRIOR FILING DATE: 1998-07-07
;  PRIOR APPLICATION NUMBER: 60/092182
;  PRIOR FILING DATE: 1998-07-09

  Query Match             1.3%;  Score 20;  DB 9;  Length 45;
  Best Local Similarity   65.9%;  Pred. No. 1.5e+05;
  Matches   29;  Conservative    0;  Mismatches   15;  Indels    0;  Gaps    0;

Qy   1400 GCTCCAGGTGCTGCCGACGCTCCGGGTGCGGGGGCCACCGCGGG 1443
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Db      2 GCTGCTCCTGCTGCCGCCGCTGCTGCTGGGGGCCTTCCCGCCGG 45


RESULT 24
US-10-211-069-35
; Sequence 35, Application US/10211069
; Publication No. US20030021797A1
; GENERAL INFORMATION:
;  APPLICANT: DATTA, Syamal K
;  APPLICANT:  KALIYAPERUMAL, Arunan
;  TITLE OF INVENTION: LOCALIZATION OF MAJOR PEPTIDE AUTOEPITOPES FOR NUCLEOSOME SPECIF
;  TITLE OF INVENTION:  IC T CELLS OF SYSTEMIC LUPUS ERYTHEMATOSUS
;  FILE REFERENCE: 290-13U1 (53662-5017
;  CURRENT APPLICATION NUMBER: US/10/211,069
;  CURRENT FILING DATE:  2002-08-02
;  PRIOR APPLICATION NUMBER: US/09/561,490
;  PRIOR FILING DATE: 2000-04-28
;  PRIOR APPLICATION NUMBER: US 60/131,448
;  PRIOR FILING DATE: 1999-04-28
;  NUMBER OF SEQ ID NOS: 61
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 35
;   LENGTH: 45
;   TYPE: DNA
;   ORGANISM: Artificial sequence
;   FEATURE:
;   OTHER INFORMATION: Histone fragment
US-10-211-069-35

  Query Match             1.3%;  Score 20;  DB 9;  Length 45;
  Best Local Similarity   65.9%;  Pred. No. 1.5e+05;
  Matches   29;  Conservative    0;  Mismatches   15;  Indels    0;  Gaps    0;

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RESULT 25
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; Sequence 122, Application US/09990438
; Publication No. US20030027754A1
; GENERAL INFORMATION:
;  APPLICANT: Ashkenazi,Avi J.
;  APPLICANT:  Baker,Kevin P.
;  APPLICANT:  Botstein,David
;  APPLICANT:  Desnoyers,Luc
;  APPLICANT:  Eaton,Dan L.
;  APPLICANT:  Ferrara,Napoleone
;  APPLICANT:  Fong,Sherman
;  APPLICANT:  Gerber,Hanspeter
;  APPLICANT:  Gerritsen,Mary E.
;  APPLICANT:  Goddard,Audrey
;  APPLICANT:  Godowski,Paul J.
;  APPLICANT:  Grimaldi,J.Christopher
;  APPLICANT:  Gurney,Austin L.
;  APPLICANT:  Kljavin,Ivar J.
;  APPLICANT:  Napier,Mary A.
;  APPLICANT:  Pan,James
;  APPLICANT:  Paoni,Nicholas F.
;  APPLICANT:  Roy, Margaret Ann
;  APPLICANT:  Stewart, Timothy A.
;  APPLICANT:  Tumas, Daniel
;  APPLICANT:  Watanabe, Colin K.
;  APPLICANT:  Williams, P. Mickey
;  APPLICANT:  Wood, William I.
;  APPLICANT:  Zhang, Zemin
;  TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
;  TITLE OF INVENTION:  Acids Encoding the Same
;  FILE REFERENCE: P2730P1C3
;  CURRENT APPLICATION NUMBER: US/09/990,438
;  CURRENT FILING DATE:  2001-11-14
;  PRIOR APPLICATION NUMBER: 60/049787
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;  PRIOR FILING DATE: 1997-11-24
;  PRIOR APPLICATION NUMBER: 60/075945
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; PRIOR APPLICATION NUMBER: 60/091982
; PRIOR FILING DATE: 1998-07-07
; PRIOR APPLICATION NUMBER: 60/092182
; PRIOR FILING DATE: 1998-07-09

Query Match 1.3%; Score 20; DB 9; Length 45;
Best Local Similarity 65.9%; Pred. No. 1.5e+05;
Matches 29; Conservative 0; Mismatches 15; Indels 0; Gaps 0;

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Job time : 167 secs

GenCore version 5.1.4_p5_4578

OM nucleic - nucleic search, using sw model

Run on: March 13, 2003, 21:47:38 ; Search time 2407 Seconds
(without alignments)
10604.108 Million cell updates/sec

Title: US-10-001-844-3
Perfect score: 1576
Sequence: 1 gcgaggcagccagcgaggga.....gaggggcgcgggaggggcc 1576

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 16154066 seqs, 8097743376 residues

Total number of hits satisfying chosen parameters: 102860

Minimum DB seq length: 0
Maximum DB seq length: 50

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 1000 summaries

Database : EST:*
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24: em_gss_mus:*
25: em_gss_other:*
26: em_gss_pro:*
27: em_gss_rod:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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	3	25	1.6	45	13	BI772215	BI772215 603056165
c	4	25	1.6	49	9	AA842027	AA842027 MBAFCF2D0
	5	25	1.6	49	9	AI813244	AI813244 3G2 Pine
c	6	25	1.6	49	10	AV833587	AV833587 AV833587
	7	24.4	1.5	49	12	BF970690	BF970690 602273861
c	8	24.2	1.5	47	10	AV947640	AV947640 AV947640
c	9	23.8	1.5	45	13	BJ000572	BJ000572 BJ000572
	10	23.8	1.5	46	9	AI701058	AI701058 wc78c06.x
c	11	23.8	1.5	47	10	AV955412	AV955412 AV955412
c	12	23.6	1.5	47	10	AV949200	AV949200 AV949200
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c	14	23.6	1.5	47	17	AZ853064	AZ853064 2M0156K04
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c	16	23.6	1.5	47	17	AZ864870	AZ864870 2M0174M10
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c	21	22.6	1.4	49	9	AA977986	AA977986 oq55a06.s
c	22	22.6	1.4	50	9	AU103717	AU103717 AU103717
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ALIGNMENTS

RESULT 1
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LOCUS BI462985 43 bp mRNA linear EST 21-AUG-2001
DEFINITION 603204504F1 NIH_MGC_97 Homo sapiens cDNA clone IMAGE:5270424 5', mRNA sequence.
ACCESSION BI462985
VERSION BI462985.1 GI:15253641
KEYWORDS EST.
SOURCE human.
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1 (bases 1 to 43)
AUTHORS NIH-MGC http://mgc.nci.nih.gov/.
TITLE National Institutes of Health, Mammalian Gene Collection (MGC)
JOURNAL Unpublished (1999)
COMMENT Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Miklos Palkovits, M.D., Ph.D.
cDNA Library Preparation: Michael J. Brownstein (NHGRI), Shiraki Toshiyuki and Piero Carninci (RIKEN)
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAM11682 row: g column: 01
High quality sequence stop: 43.
FEATURES Location/Qualifiers
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/note="Organ: testis; Vector: pBluescriptR (modified pBluescript KS+); Site_1: BamHI; Site_2: SalI-XhoI (gtcgag); Oligo-dT primed using primer 5'-TTTTTTTTTTTTTTTVN-3', size-selected for average insert size 2.2 kb and normalized to ROT 5. This is a primary library enriched for full-length clones and constructed using the Cap-trapper method (Carninci, in preparation). Library constructed by M. Brownstein (NIMH/NHGRI, National Institutes of Health). Note: this is a NIH_MGC Library."
BASE COUNT 5 a 8 c 28 g 2 t
ORIGIN

Query Match 1.7%; Score 26.2; DB 13; Length 43;
Best Local Similarity 79.5%; Pred. No. 2.2e+05;
Matches 31; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

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RESULT 2
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DEFINITION 1M0127I18R Mouse 10kb plasmid UUGC1M library Mus musculus genomic clone UUGC1M0127I18 R, DNA sequence.
ACCESSION AZ374770
VERSION AZ374770.1 GI:10488470
KEYWORDS GSS.
SOURCE house mouse.
ORGANISM Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE 1 (bases 1 to 50)
AUTHORS Dunn,D., Aoyagi,A., Barber,M., Beacorn,T., Duval,B., Hamil,C., Islam,H., Longacre,S., Mahmoud,M., Meenen,E., Pedersen,T., Reilly,M., Rose,M., Rose,R., Stokes,R., Tingey,A., von Niederhausern,A. and Wright,D.,Weiss,R.
TITLE Mouse whole genome scaffolding with paired end reads from 10kb plasmid inserts
JOURNAL Unpublished (2000)
COMMENT Contact: Robert B. Weiss
University of Utah Genome Center
University of Utah
Rm. 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., SLC, UT 84112, USA
Tel: 801 585 5606
Fax: 801 585 7177
Email: ddunn@genetics.utah.edu
Insert Length: 10000 Std Error: 0.00
Plate: 0127 row: I column: 18
Seq primer: CACACAGGAAACAGCTATGACC
Class: plasmid ends
High quality sequence stop: 50.
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/clone="UUGC1M0127I18"
/clone_lib="Mouse 10kb plasmid UUGC1M library"

/sex="Male"
/lab_host="E. Coli strain XL10-Gold, T1-resistant, F-"
/note="Vector: PWD42nv; Purified genomic DNA from M. musculus C57BL/6J (male) was obtained from the Jackson Laboratory Mouse DNA Resource (http://www.jax.org/resources/documents/dnares/). The DNA was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptored DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pWD42 (gi|4732114|gb|AF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptored mouse DNA was annealed to adaptored vector DNA, and transformed into chemically-competent E. coli XL10-Gold (Stratagene) cells and selected for ampicillin resistance."

BASE COUNT 0 a 25 c 0 g 25 t
ORIGIN

Query Match 1.6%; Score 26; DB 17; Length 50;
Best Local Similarity 70.0%; Pred. No. 2.5e+05;
Matches 35; Conservative 0; Mismatches 15; Indels 0; Gaps 0;

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RESULT 3
BI772215
LOCUS BI772215 45 bp mRNA linear EST 25-SEP-2001
DEFINITION 603056165F1 NIH_MGC_122 Homo sapiens cDNA clone IMAGE:5205425 5', mRNA sequence.
ACCESSION BI772215
VERSION BI772215.1 GI:15763793
KEYWORDS EST.
SOURCE human.
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1 (bases 1 to 45)
AUTHORS NIH-MGC http://mgc.nci.nih.gov/.
TITLE National Institutes of Health, Mammalian Gene Collection (MGC)
JOURNAL Unpublished (1999)
COMMENT Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAM11515 row: b column: 18
High quality sequence stop: 45.
FEATURES Location/Qualifiers
source 1. .45
/organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="IMAGE:5205425"
/clone_lib="NIH_MGC_122"
/lab_host="DH10B"
/note="Organ: pooled lung and spleen; Vector: pCMV-SPORT6; Site_1: NotI; Site_2: EcoRV (destroyed); RNA source anonymous pool of 24 week female lung, 16 week female spleen, and 20-22 week male spleens. Library is oligo-dT primed and directionally cloned (EcoRV site is destroyed upon cloning). Average insert size 1.4 kb, insert size range 1-3 kb. Library is normalized and enriched for full-length clones and was constructed by C. Gruber (Invitrogen). Research Genetics tracking code 026. Note: this is a NIH_MGC Library."

BASE COUNT 6 a 11 c 25 g 3 t
ORIGIN

Query Match 1.6%; Score 25; DB 13; Length 45;
Best Local Similarity 75.6%; Pred. No. 3.8e+05;
Matches 31; Conservative 0; Mismatches 10; Indels 0; Gaps 0;

```
Qy    1342 CGGCGGGGACAGCGGCGGCGGGGACCGCGGGGGCGGCGGCG 1382
           |||||| | ||   |  |||| ||| |||| ||||||||||
Db       5 CGGCGGTGGCAAGAGTAGCGGTGACGGCGGCGGCGGCGGCG 45
```

RESULT 4
AA842027/c
LOCUS AA842027 49 bp mRNA linear EST 02-MAR-1998
DEFINITION MBAFCF2D03T3 Brugia malayi adult female cDNA (SAW96MLW-BmAF) Brugia malayi cDNA clone AFCF2D03 5', mRNA sequence.
ACCESSION AA842027
VERSION AA842027.1 GI:2923363
KEYWORDS EST.
SOURCE Brugia malayi.
ORGANISM Brugia malayi
Eukaryota; Metazoa; Nematoda; Chromadorea; Spirurida; Filarioidea; Onchocercidae; Brugia.
REFERENCE 1 (bases 1 to 49)
AUTHORS Blaxter,M.L., Waterfall,M., Daub,J., Lizotte,M., Baron,L. and Jones,S.J.
TITLE Genes expressed in adult female Brugia malayi
JOURNAL Unpublished (1996)
COMMENT Contact: Blaxter ML
Institute of Cell, Animal and Population Biology
University of Edinburgh
Ashworth Labs, King's Buildings, West Mains Road, Edinburgh, EH9 3JT, UK.
Tel: +44 131 650 6760
Fax: +44 131 670 5450
Email: mark.blaxter@ed.ac.uk
The ABI trace of this sequence can be viewed at
http://www.sanger.ac.uk/brugia/AFC/MBAFCF2D03T3.html
Seq primer: T3.
FEATURES Location/Qualifiers
source 1. .49
/organism="Brugia malayi"
/db_xref="taxon:6279"
/clone="AFCF2D03"
/clone_lib="Brugia malayi adult female cDNA (SAW96MLW-BmAF)"
/sex="female"
/dev_stage="adult"
/lab_host="XL1-Blue MRF'"
/note="Vector: Lambda Uni-ZAP XR; Site_1: Eco RI; Site_2: Xho I; Lymphatic filarial nematode parasite of humans. mRNA was prepared from approximately 50 adult females isolated from the peritoneal cavity of jirds and converted to double-stranded cDNA using reverse transcriptase and oligo(dT) followed by RNase H and DNA pol I. The library has 5 x 10E6 independent recombinants and the average insert size is ~900bp.The library was constructed by Michelle Lizotte-Waniewski. The library is available from Dr.S.A.Williams, email: genome@smith.edu."

BASE COUNT 0 a 23 c 2 g 24 t
ORIGIN

Query Match 1.6%; Score 25; DB 9; Length 49;
Best Local Similarity 69.4%; Pred. No. 3.8e+05;
Matches 34; Conservative 0; Mismatches 15; Indels 0; Gaps 0;

```
Qy      12 AGCGAGGGAGAGAGCGAGCGGGCGAGCCGGAGCGAGGAAGGGAAAGCGC 60
```

```
          || ||| ||||||| ||| | | |||   ||| |||  || || ||| |
Db     49 AGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGCAC 1


RESULT 5
AI813244
LOCUS       AI813244                  49 bp    mRNA    linear   EST 08-JUL-1999
DEFINITION  3G2 Pine Lambda Zap Xylem library Pinus taeda cDNA, mRNA sequence.
ACCESSION   AI813244
VERSION     AI813244.1  GI:5424459
KEYWORDS    EST.
SOURCE      loblolly pine.
  ORGANISM  Pinus taeda
            Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
            Spermatophyta; Coniferopsida; Coniferales; Pinaceae; Pinus; Pinus.
REFERENCE   1  (bases 1 to 49)
  AUTHORS   Whetten,R.W., Kinlaw,C.S., Retzel,E. and Sederoff,R.R.
  TITLE     The Pine Gene Discovery Project
  JOURNAL   Unpublished (1999)
COMMENT     Contact: Ross Whetten
            Forest Biotechnology Group
            North Carolina State University
            Dept. of Forestry, NC State University, 6113 Jordan Hall, Raleigh
            ,NC, 27695-8008
            Tel: 919-515-7800
            Fax: 919-515-7801
            Email: rosswhet@unity.ncsu.edu
            Seq primer: T3.
FEATURES             Location/Qualifiers
     source          1. .49
                     /organism="Pinus taeda"
                     /db_xref="taxon:3352"
                     /clone_lib="Pine Lambda Zap Xylem library"
                     /tissue_type="differentiating xylem"
                     /note="Vector: Lambda Zap; Site_1: EcoRI; Site_2: XhoI;
                     Differentiating xylem was collected from the main stem of
                     a 35-year old loblolly pine tree harvested during the
                     growing season. RNA isolation and library preparation
                     followed the methods of Allona et al., PNAS 95:9693-8,
                     1998"
BASE COUNT       24 a      0 c     25 g      0 t
ORIGIN

  Query Match             1.6%;  Score 25;  DB 9;  Length 49;
  Best Local Similarity   69.4%;  Pred. No. 3.8e+05;
  Matches   34;  Conservative    0;  Mismatches   15;  Indels    0;  Gaps    0;

Qy      21 GAGAGCGAGCGGGCGAGCCGGAGCGAGGAAGGGAAAGCGCAAGAGAGAG 69
           ||||| ||| | | |||   ||| |||  || || || |  |||||||
Db       1 GAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 49


RESULT 6
AV833587/c
LOCUS       AV833587                  49 bp    mRNA    linear   EST 22-JUN-2001
DEFINITION  AV833587 K. Sato unpublished cDNA library: Hordeum vulgare subsp.
            vulgare shoots germination Hordeum vulgare subsp. vulgare cDNA
            clone bags16a08, mRNA sequence.
ACCESSION   AV833587
VERSION     AV833587.1  GI:14525676
KEYWORDS    EST.
SOURCE      Hordeum vulgare subsp. vulgare.
  ORGANISM  Hordeum vulgare subsp. vulgare
            Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
            Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; Pooideae
            ; Triticeae; Hordeum.
REFERENCE   1  (bases 1 to 49)
  AUTHORS   Sato,K.
  TITLE     Barley EST sequencing project in NIG and Okayama Univ
  JOURNAL   Unpublished (2001)
COMMENT     Contact: Kazuhiro Sato
            Research Institute for Bioresources
            Okayama University, Barley Germplasm Center
            Chuo 2-20-1, Kurashiki, Okayama 710-0046, Japan
            Email: kazsato@rib.okayama-u.ac.jp,
            URL:http://www.rib.okayama-u.ac.jp/barley/
            Sato,K., Saisho,D., Takeda,K., Shini,T. and Kohara,Y. Direct
            submission;
            database:http://www.shigen.nig.ac.jp/barley/Barley.html.
FEATURES             Location/Qualifiers
     source          1. .49
                     /organism="Hordeum vulgare subsp. vulgare"
                     /cultivar="Haruna Nijo"
                     /db_xref="taxon:112509"
                     /clone="bags16a08"
                     /clone_lib="K. Sato unpublished cDNA library: Hordeum
                     vulgare subsp. vulgare shoots germination"
                     /tissue_type="shoots"
                     /dev_stage="germination"
BASE COUNT       0 a      25 c      0 g      24 t
ORIGIN

  Query Match             1.6%;  Score 25;  DB 10;  Length 49;
  Best Local Similarity   69.4%;  Pred. No. 3.8e+05;
  Matches   34;  Conservative    0;  Mismatches   15;  Indels    0;  Gaps    0;

Qy      21 GAGAGCGAGCGGGCGAGCCGGAGCGAGGAAGGGAAAGCGCAAGAGAGAG 69
           ||||| ||| | | |||   ||| |||  || || || |  |||||||
Db      49 GAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1


RESULT 7
BF970690
LOCUS       BF970690                  49 bp    mRNA    linear   EST 22-JAN-2001
DEFINITION  602273861F1 NIH_MGC_84 Homo sapiens cDNA clone IMAGE:4361943 5',
            mRNA sequence.
ACCESSION   BF970690
VERSION     BF970690.1  GI:12337905
KEYWORDS    EST.
SOURCE      human.
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 49)
  AUTHORS   NIH-MGC http://mgc.nci.nih.gov/.
  TITLE     National Institutes of Health, Mammalian Gene Collection (MGC)
  JOURNAL   Unpublished (1999)
COMMENT     Contact: Robert Strausberg, Ph.D.
            Email: cgapbs-r@mail.nih.gov
            Tissue Procurement: ATCC
             cDNA Library Preparation: Life Technologies, Inc.
             cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
             DNA Sequencing by: Incyte Genomics, Inc.
             Clone distribution: MGC clone distribution information can be
            found through the I.M.A.G.E. Consortium/LLNL at:
            http://image.llnl.gov
            Plate: LLAM10005  row: i  column: 16
            High quality sequence stop: 49.
FEATURES             Location/Qualifiers
     source          1. .49
                     /organism="Homo sapiens"
                     /db_xref="taxon:9606"
                     /clone="IMAGE:4361943"
                     /clone_lib="NIH_MGC_84"
                     /tissue_type="adrenal cortex carcinoma, cell line"
                     /lab_host="DH10B (phage-resistant)"
                     /note="Organ: adrenal gland; Vector: pCMV-SPORT6; Site_1:
                     NotI; Site_2: SalI; Cloned unidirectionally; oligo-dT
                     primed. Average insert size 1.229 kb. Library enriched for
                     full-length clones and constructed by Life Technologies.
                     Note: this is a NIH_MGC Library."
BASE COUNT       8 a      12 c      25 g      4 t
ORIGIN

  Query Match             1.5%;  Score 24.4;  DB 12;  Length 49;
  Best Local Similarity   73.8%;  Pred. No. 5e+05;
```

```
  Matches   31;  Conservative    0;  Mismatches   11;  Indels    0;  Gaps    0;

Qy   1341 GCGGCGGGGACAGCGGCGGCGGGGACCGCGGGGGCGGCGGCG 1382
          || ||   | | |||||||||| | | ||  ||||||||||
Db      1 GCAGCTACGGCGGCGGCGGCGGTGGCGGCTAGGGCGGCGGCG 42


RESULT 8
AV947640/c
LOCUS       AV947640                 47 bp    mRNA    linear   EST 14-MAR-2002
DEFINITION  AV947640 Nori Satoh unpublished cDNA library, young adult Ciona
            intestinalis cDNA clone ciad01g16 5', mRNA sequence.
ACCESSION   AV947640
VERSION     AV947640.1  GI:19425399
KEYWORDS    EST.
SOURCE      Ciona intestinalis.
  ORGANISM  Ciona intestinalis
            Eukaryota; Metazoa; Chordata; Urochordata; Ascidiacea; Enterogona;
            Phlebobranchia; Cionidae; Ciona.
REFERENCE   1  (bases 1 to 47)
  AUTHORS   Satoh,N., Satou,Y., Kohara,Y. and Shin-i,T.
  TITLE     Expressed genes in Ciona intestinalis
  JOURNAL   Unpublished (2000)
COMMENT     Contact: Nori Satoh
            Department of Zoology
            Kyoto University
            Sakyo-ku, Kyoto, Kyoto 606-8502, Japan
            Tel: 81-75-753-4081
            Fax: 81-75-705-1113
            Email: satoh@ascidian.zool.kyoto-u.ac.jp.
FEATURES             Location/Qualifiers
     source          1. .47
                     /organism="Ciona intestinalis"
                     /db_xref="taxon:7719"
                     /clone="ciad01g16"
                     /clone_lib="Nori Satoh unpublished cDNA library, young
                     adult"
                     /tissue_type="whole animal"
                     /dev_stage="young adult"
                     /note="Vector: pBluescript SK"
BASE COUNT        0 a     23 c      0 g     23 t      1 others
ORIGIN

  Query Match             1.5%;  Score 24.2;  DB 10;  Length 47;
  Best Local Similarity   69.6%;  Pred. No. 5.4e+05;
  Matches   32;  Conservative    0;  Mismatches   14;  Indels    0;  Gaps    0;

Qy      12 AGCGAGGGAGAGAGCGAGCGGGCGAGCCGGAGCGAGGAAGGGAAAG 57
           || ||| ||||||| ||| | | |||   ||| |||  || || ||
Db      46 AGAGAGAGAGAGAGAGAGAGAGAGANAGAGAGAGAGAGAGAGAG 1


RESULT 9
BJ000572/c
LOCUS       BJ000572                 45 bp    mRNA    linear   EST 05-DEC-2001
DEFINITION  BJ000572 MF01SSA cDNA Oryzias latipes cDNA clone MF01SSA019B12 5',
            mRNA sequence.
ACCESSION   BJ000572
VERSION     BJ000572.1  GI:17361239
KEYWORDS    EST.
SOURCE      Japanese medaka.
  ORGANISM  Oryzias latipes
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
            Acanthomorpha; Acanthopterygii; Percomorpha; Atherinomorpha;
            Beloniformes; Adrianichthyidae; Oryziinae; Oryzias.
REFERENCE   1  (bases 1 to 45)
  AUTHORS   Kohara,Y., Shin-i,T., Kimura,T., Narita,T., Jindo,T. and Takeda,H.
  TITLE     Medaka EST Project in Takeda's lab
  JOURNAL   Unpublished (2001)
COMMENT     Contact: Tadasu Shin-i
            Center For Genetic Resource Information
            National Institute of Genetics
            1111 Yata, Mishima, Shizuoka 411-8540, Japan
            Tel: 81-559-81-6856
            Fax: 81-559-81-6855
            Email: tshini@genes.nig.ac.jp.
FEATURES             Location/Qualifiers
     source          1. .45
                     /organism="Oryzias latipes"
                     /strain="Hd-rR"
                     /db_xref="taxon:8090"
                     /clone="MF01SSA019B12"
                     /clone_lib="MF01SSA cDNA"
                     /sex="mixture of female and male"
                     /tissue_type="whole embryo"
                     /dev_stage="segmentation stage 20 - 25"
BASE COUNT        1 a     23 c      0 g     19 t      2 others
ORIGIN

  Query Match             1.5%;  Score 23.8;  DB 13;  Length 45;
  Best Local Similarity   68.9%;  Pred. No. 6.4e+05;
  Matches   31;  Conservative    0;  Mismatches   14;  Indels    0;  Gaps    0;

Qy      13 GCGAGGGAGAGAGCGAGCGGGCGAGCCGGAGCGAGGAAGGGAAAG 57
           | ||| ||||||| ||| | | |||   ||| |||  || || ||
Db      45 GNGAGNGAGAGAGAGAGTGAGAGAGAGAGAGAGAGAGAGAG 1


RESULT 10
AI701058
LOCUS       AI701058                 46 bp    mRNA    linear   EST 17-DEC-1999
DEFINITION  wc78c06.x1 NCI_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2324746 3'
            similar to WP:C18D11.4 CE18515 RNA RECOGNITION MOTIF. ;contains
            MER22.t3 MSR1 repetitive element ;, mRNA sequence.
ACCESSION   AI701058
VERSION     AI701058.1  GI:4988958
KEYWORDS    EST.
SOURCE      human.
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 46)
  AUTHORS   NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
  TITLE     National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
            Tumor Gene Index
  JOURNAL   Unpublished (1997)
COMMENT     Contact: Robert Strausberg, Ph.D.
            Email: cgapbs-r@mail.nih.gov
            Life Technologies catalog #: 11548-013
             DNA Sequencing by: Washington University Genome Sequencing Center
             Clone distribution: NCI-CGAP clone distribution information can be
            found through the I.M.A.G.E. Consortium/LLNL at:
            www-bio.llnl.gov/bbrp/image/image.html

            Trace considered overall poor quality
            Insert Length: 3363   Std Error: 0.00
            Seq primer: -40UP from Gibco
            High quality sequence stop: 1.
FEATURES             Location/Qualifiers
     source          1. .46
                     /organism="Homo sapiens"
                     /db_xref="taxon:9606"
                     /clone="IMAGE:2324746"
                     /clone_lib="NCI_CGAP_Pan1"
                     /tissue_type="adenocarcinoma"
                     /lab_host="DH10B"
                     /note="Organ: pancreas; Vector: pCMV-SPORT6; Site_1: SalI;
                     Site_2: NotI; Cloned unidirectionally.  Primer: Oligo dT.
                     Average insert size 1.72 kb. Life Technologies catalog #:
                     11548-013"
BASE COUNT        8 a      8 c     30 g      0 t
ORIGIN

  Query Match             1.5%;  Score 23.8;  DB 9;  Length 46;
  Best Local Similarity   72.1%;  Pred. No. 6.4e+05;
```

```
  Matches   31;  Conservative    0;  Mismatches   12;  Indels    0;  Gaps    0;

Qy   1346 GGGGACAGCGGCGGCGGGGACCGCGGGGGCGGCGGCGGCAGAG 1388
          ||||  ||||||| ||||| | |||| | ||||  | ||||
Db      2 GGGGGGGGCGGCGGAGGGGAGCCCGGGCGAGGCGCGAGAAGAG 44


RESULT 11
AV955412/c
LOCUS       AV955412                  47 bp    mRNA    linear   EST 14-MAR-2002
DEFINITION  AV955412 Nori Satoh unpublished cDNA library, egg Ciona
            intestinalis cDNA clone cieg08d15 5', mRNA sequence.
ACCESSION   AV955412
VERSION     AV955412.1  GI:19443711
KEYWORDS    EST.
SOURCE      Ciona intestinalis.
  ORGANISM  Ciona intestinalis
            Eukaryota; Metazoa; Chordata; Urochordata; Ascidiacea; Enterogona;
            Phlebobranchia; Cionidae; Ciona.
REFERENCE   1  (bases 1 to 47)
  AUTHORS   Satoh,N., Satou,Y., Kohara,Y. and Shin-i,T.
  TITLE     Expressed genes in Ciona intestinalis
  JOURNAL   Unpublished (2000)
COMMENT     Contact: Nori Satoh
            Department of Zoology
            Kyoto University
            Sakyo-ku, Kyoto, Kyoto 606-8502, Japan
            Tel: 81-75-753-4081
            Fax: 81-75-705-1113
            Email: satoh@ascidian.zool.kyoto-u.ac.jp.
FEATURES             Location/Qualifiers
     source          1. .47
                     /organism="Ciona intestinalis"
                     /db_xref="taxon:7719"
                     /clone="cieg08d15"
                     /clone_lib="Nori Satoh unpublished cDNA library, egg"
                     /tissue_type="whole animal"
                     /dev_stage="egg"
                     /note="Vector: pBluescript SK"
BASE COUNT        0 a     24 c      0 g     19 t      4 others
ORIGIN

  Query Match             1.5%;  Score 23.8;  DB 10;  Length 47;
  Best Local Similarity   66.0%;  Pred. No. 6.4e+05;
  Matches   31;  Conservative    0;  Mismatches   16;  Indels    0;  Gaps    0;

Qy      23 GAGCGAGCGGGCGAGCCGGAGCGAGGAAGGGAAAGCGCAAGAGAGAG 69
           | | ||| | | |||   ||| |||  || || || |  ||||||||
Db      47 GNGNGAGAGNGNGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1


RESULT 12
AV949200/c
LOCUS       AV949200                  47 bp    mRNA    linear   EST 14-MAR-2002
DEFINITION  AV949200 Nori Satoh unpublished cDNA library, larva Ciona
            intestinalis cDNA clone cilv02g12 5', mRNA sequence.
ACCESSION   AV949200
VERSION     AV949200.1  GI:19437499
KEYWORDS    EST.
SOURCE      Ciona intestinalis.
  ORGANISM  Ciona intestinalis
            Eukaryota; Metazoa; Chordata; Urochordata; Ascidiacea; Enterogona;
            Phlebobranchia; Cionidae; Ciona.
REFERENCE   1  (bases 1 to 47)
  AUTHORS   Satoh,N., Satou,Y., Kohara,Y. and Shin-i,T.
  TITLE     Expressed genes in Ciona intestinalis
  JOURNAL   Unpublished (2000)
COMMENT     Contact: Nori Satoh
            Department of Zoology
            Kyoto University
            Sakyo-ku, Kyoto, Kyoto 606-8502, Japan
            Tel: 81-75-753-4081
            Fax: 81-75-705-1113
            Email: satoh@ascidian.zool.kyoto-u.ac.jp.
FEATURES             Location/Qualifiers
     source          1. .47
                     /organism="Ciona intestinalis"
                     /db_xref="taxon:7719"
                     /clone="cilv02g12"
                     /clone_lib="Nori Satoh unpublished cDNA library, larva"
                     /tissue_type="whole animal"
                     /dev_stage="larva"
                     /note="Vector: pBluescript SK"
BASE COUNT        1 a     23 c      0 g     23 t
ORIGIN

  Query Match             1.5%;  Score 23.6;  DB 10;  Length 47;
  Best Local Similarity   69.6%;  Pred. No. 7e+05;
  Matches   32;  Conservative    0;  Mismatches   14;  Indels    0;  Gaps    0;

Qy      12 AGCGAGGGAGAGAGCGAGCGGGCGAGCCGGAGCGAGGAAGGGAAAG 57
           || ||| ||||||| ||| | | |||   ||| |||  || || ||
Db      46 AGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1


RESULT 13
AZ385990/c
LOCUS       AZ385990                  47 bp    DNA     linear   GSS 02-OCT-2000
DEFINITION  1M0144D16R Mouse 10kb plasmid UUGC1M library Mus musculus genomic
            clone UUGC1M0144D16 R, DNA sequence.
ACCESSION   AZ385990
VERSION     AZ385990.1  GI:10499690
KEYWORDS    GSS.
SOURCE      house mouse.
  ORGANISM  Mus musculus
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE   1  (bases 1 to 47)
  AUTHORS   Dunn,D., Aoyagi,A., Barber,M., Beacorn,T., Duval,B., Hamil,C.,
            Islam,H., Longacre,S., Mahmoud,M., Meenen,E., Pedersen,T., Reilly
            ,M., Rose,M., Rose,R., Stokes,R., Tingey,A., von Niederhausern,A.
            and Wright,D.,Weiss,R.
  TITLE     Mouse whole genome scaffolding with paired end reads from 10kb
            plasmid inserts
  JOURNAL   Unpublished (2000)
COMMENT     Contact: Robert B. Weiss
            University of Utah Genome Center
            University of Utah
            Rm. 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., SLC, UT
            84112, USA
            Tel: 801 585 5606
            Fax: 801 585 7177
            Email: ddunn@genetics.utah.edu
            Insert Length: 10000   Std Error: 0.00
            Plate: 0144  row: D  column: 16
            Seq primer: CACACAGGAAACAGCTATGACC
            Class: plasmid ends
            High quality sequence stop: 47.
FEATURES             Location/Qualifiers
     source          1. .47
                     /organism="Mus musculus"
                     /strain="C57BL/6J"
                     /db_xref="taxon:10090"
                     /clone="UUGC1M0144D16"
                     /clone_lib="Mouse 10kb plasmid UUGC1M library"
                     /sex="Male"
                     /lab_host="E. Coli strain XL10-Gold, T1-resistant, F-"
                     /note="Vector: PWD42nv; Purified genomic DNA from M.
                     musculus C57BL/6J (male) was obtained  from the Jackson
                     Laboratory Mouse DNA Resource
                     (http://www.jax.org/resources/documents/dnares/). The DNA
                     was hydrodynamically sheared by repeated passage through a
                     0.005 inch orifice at constant velocity. The sheared DNA
                     was blunt end-repaired with T4 DNA polymerase and T4
                     polynucleotide kinase. Adaptor oligonucleotides were
                     ligated to the blunt ends in high  molar excess. The
```

adaptored DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pWD42 (gi|4732114|gb|AF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptored mouse DNA was annealed to adaptored vector DNA, and transformed into chemically-competent E. coli XL10-Gold (Stratagene) cells and selected for ampicillin resistance."

BASE COUNT 0 a 23 c 0 g 24 t
ORIGIN

Query Match 1.5%; Score 23.6; DB 17; Length 47;
Best Local Similarity 69.6%; Pred. No. 7e+05;
Matches 32; Conservative 0; Mismatches 14; Indels 0; Gaps 0;

```
Qy      12 AGCGAGGGAGAGAGCGAGCGGGCGAGCCGGAGCGAGGAAGGGAAAG 57
           || ||| ||||||| ||| | | |||   ||| |||  || || ||
Db      47 AGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2
```

RESULT 14
AZ853064/c
LOCUS AZ853064 47 bp DNA linear GSS 21-FEB-2001
DEFINITION 2M0156K04F Mouse 10kb plasmid UUGC1M library Mus musculus genomic clone UUGC2M0156K04 F, DNA sequence.
ACCESSION AZ853064
VERSION AZ853064.1 GI:13040804
KEYWORDS GSS.
SOURCE house mouse.
ORGANISM Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE 1 (bases 1 to 47)
AUTHORS Dunn,D., Aoyagi,A., Barber,M., Beacorn,T., Duval,B., Hamil,C., Islam,H., Longacre,S., Mahmoud,M., Meenen,E., Pedersen,T., Reilly ,M., Rose,M., Rose,R., Stokes,R., Tingey,A., von Niederhausern,A. and Wright,D.,Weiss,R.
TITLE Mouse whole genome scaffolding with paired end reads from 10kb plasmid inserts
JOURNAL Unpublished (2000)
COMMENT Contact: Robert B. Weiss
University of Utah Genome Center
University of Utah
Rm. 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., SLC, UT 84112, USA
Tel: 801 585 5606
Fax: 801 585 7177
Email: ddunn@genetics.utah.edu
Insert Length: 10000 Std Error: 0.00
Plate: 0156 row: K column: 04
Seq primer: CGTTGTAAAACGACGGCCAGT
Class: plasmid ends
High quality sequence stop: 47.
FEATURES Location/Qualifiers
source 1. .47
/organism="Mus musculus"
/strain="C57BL/6J"
/db_xref="taxon:10090"
/clone="UUGC2M0156K04"
/clone_lib="Mouse 10kb plasmid UUGC1M library"
/sex="Male"
/lab_host="E. Coli strain XL10-Gold, T1-resistant, F-"
/note="Vector: PWD42nv; Purified genomic DNA from M. musculus C57BL/6J (male) was obtained from the Jackson Laboratory Mouse DNA Resource (http://www.jax.org/resources/documents/dnares/). The DNA was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The

adaptored DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pWD42 (gi|4732114|gb|AF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptored mouse DNA was annealed to adaptored vector DNA, and transformed into chemically-competent E. coli XL10-Gold (Stratagene) cells and selected for ampicillin resistance."

BASE COUNT 0 a 23 c 0 g 24 t
ORIGIN

Query Match 1.5%; Score 23.6; DB 17; Length 47;
Best Local Similarity 69.6%; Pred. No. 7e+05;
Matches 32; Conservative 0; Mismatches 14; Indels 0; Gaps 0;

Qy 12 AGCGAGGGAGAGAGCGAGCGGGCGAGCCGGAGCGAGGAAGGGAAAG 57
|| ||| ||||||| ||| | | ||| ||| ||| || || ||
Db 47 AGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2

RESULT 15
AZ862836/c
LOCUS AZ862836 47 bp DNA linear GSS 21-FEB-2001
DEFINITION 2M0170N09R Mouse 10kb plasmid UUGC1M library Mus musculus genomic clone UUGC2M0170N09 R, DNA sequence.
ACCESSION AZ862836
VERSION AZ862836.1 GI:13060537
KEYWORDS GSS.
SOURCE house mouse.
ORGANISM Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE 1 (bases 1 to 47)
AUTHORS Dunn,D., Aoyagi,A., Barber,M., Beacorn,T., Duval,B., Hamil,C., Islam,H., Longacre,S., Mahmoud,M., Meenen,E., Pedersen,T., Reilly ,M., Rose,M., Rose,R., Stokes,R., Tingey,A., von Niederhausern,A. and Wright,D.,Weiss,R.
TITLE Mouse whole genome scaffolding with paired end reads from 10kb plasmid inserts
JOURNAL Unpublished (2000)
COMMENT Contact: Robert B. Weiss
University of Utah Genome Center
University of Utah
Rm. 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., SLC, UT 84112, USA
Tel: 801 585 5606
Fax: 801 585 7177
Email: ddunn@genetics.utah.edu
Insert Length: 10000 Std Error: 0.00
Plate: 0170 row: N column: 09
Seq primer: CACACAGGAAACAGCTATGACC
Class: plasmid ends
High quality sequence stop: 47.
FEATURES Location/Qualifiers
source 1. .47
/organism="Mus musculus"
/strain="C57BL/6J"
/db_xref="taxon:10090"
/clone="UUGC2M0170N09"
/clone_lib="Mouse 10kb plasmid UUGC1M library"
/sex="Male"
/lab_host="E. Coli strain XL10-Gold, T1-resistant, F-"
/note="Vector: PWD42nv; Purified genomic DNA from M. musculus C57BL/6J (male) was obtained from the Jackson Laboratory Mouse DNA Resource (http://www.jax.org/resources/documents/dnares/). The DNA was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The

adaptored DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pWD42 (gi|4732114|gb|AF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptored mouse DNA was annealed to adaptored vector DNA, and transformed into chemically-competent E. coli XL10-Gold (Stratagene) cells and selected for ampicillin resistance."

BASE COUNT 0 a 23 c 0 g 24 t
ORIGIN

Query Match 1.5%; Score 23.6; DB 17; Length 47;
Best Local Similarity 69.6%; Pred. No. 7e+05;
Matches 32; Conservative 0; Mismatches 14; Indels 0; Gaps 0;

```
Qy      12 AGCGAGGGAGAGAGCGAGCGGGCGAGCCGGAGCGAGGAAGGGAAAG 57
           || ||| ||||||| ||| | | |||   ||| |||  || || ||
Db      47 AGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2
```

RESULT 16
AZ864870/c
LOCUS AZ864870 47 bp DNA linear GSS 21-FEB-2001
DEFINITION 2M0174M10R Mouse 10kb plasmid UUGC1M library Mus musculus genomic clone UUGC2M0174M10 R, DNA sequence.
ACCESSION AZ864870
VERSION AZ864870.1 GI:13064604
KEYWORDS GSS.
SOURCE house mouse.
ORGANISM Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE 1 (bases 1 to 47)
AUTHORS Dunn,D., Aoyagi,A., Barber,M., Beacorn,T., Duval,B., Hamil,C., Islam,H., Longacre,S., Mahmoud,M., Meenen,E., Pedersen,T., Reilly,M., Rose,M., Rose,R., Stokes,R., Tingey,A., von Niederhausern,A. and Wright,D.,Weiss,R.
TITLE Mouse whole genome scaffolding with paired end reads from 10kb plasmid inserts
JOURNAL Unpublished (2000)
COMMENT Contact: Robert B. Weiss
University of Utah Genome Center
University of Utah
Rm. 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., SLC, UT 84112, USA
Tel: 801 585 5606
Fax: 801 585 7177
Email: ddunn@genetics.utah.edu
Insert Length: 10000 Std Error: 0.00
Plate: 0174 row: M column: 10
Seq primer: CACACAGGAAACAGCTATGACC
Class: plasmid ends
High quality sequence stop: 47.

FEATURES Location/Qualifiers
source 1. .47
/organism="Mus musculus"
/strain="C57BL/6J"
/db_xref="taxon:10090"
/clone="UUGC2M0174M10"
/clone_lib="Mouse 10kb plasmid UUGC1M library"
/sex="Male"
/lab_host="E. Coli strain XL10-Gold, T1-resistant, F-"
/note="Vector: PWD42nv; Purified genomic DNA from M. musculus C57BL/6J (male) was obtained from the Jackson Laboratory Mouse DNA Resource (http://www.jax.org/resources/documents/dnares/). The DNA was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The

adaptored DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pWD42 (gi|4732114|gb|AF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptored mouse DNA was annealed to adaptored vector DNA, and transformed into chemically-competent E. coli XL10-Gold (Stratagene) cells and selected for ampicillin resistance."

BASE COUNT 0 a 23 c 0 g 24 t
ORIGIN

Query Match 1.5%; Score 23.6; DB 17; Length 47;
Best Local Similarity 69.6%; Pred. No. 7e+05;
Matches 32; Conservative 0; Mismatches 14; Indels 0; Gaps 0;

Qy 12 AGCGAGGGAGAGAGCGAGCGGGCGAGCCGGAGCGAGGAAGGGAAAG 57
|| ||| ||||||| ||| | | ||| ||| ||| || || ||
Db 47 AGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2

RESULT 17
AL676139
LOCUS AL676139 45 bp mRNA linear EST 18-MAR-2002
DEFINITION AL676139 XGC-gastrula Silurana tropicalis cDNA clone TGas053o17 5', mRNA sequence.
ACCESSION AL676139
VERSION AL676139.1 GI:19532513
KEYWORDS EST.
SOURCE western clawed frog.
ORGANISM Silurana tropicalis
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae; Xenopodinae; Silurana.
REFERENCE 1 (bases 1 to 45)
AUTHORS Taylor,R., Ashurst,J.L., Croning,M.D.R., Zorn,A.M. and Rogers,J.
TITLE Sanger Xenopus tropicalis EST project 2002
JOURNAL Unpublished (2001)
COMMENT Contact: Taylor R
Sanger Centre
Hinxton, Cambridgeshire, CB10 1SA, UK
Email: trop@sanger.ac.uk
Sanger Xenopus tropicalis EST project 2001
TROPICALIS_SEQUENCE_ID: TGas053o17.p1cSP6
Sequencing primer: P1CSP6
This sequence is from a Xenopus Gene Collection (XGC) library constructed by Aaron M. Zorn.

FEATURES Location/Qualifiers
source 1. .45
/organism="Silurana tropicalis"
/db_xref="taxon:8364"
/clone="TGas053o17"
/clone_lib="XGC-gastrula"
/dev_stage="gastrula (stages 10.5-13 mixed)"
/lab_host="Escherichia coli XL1-blue"
/note="Vector: pCS107; Site_1: EcoRI; Site_2: NotI; cDNA was oligo dT primed from 5ug of poly A+ RNA from stages 10-13 gastrulae. EcoRI-NotI cut cDNA was then ligated into pCS107 with EcoRI at the 5' end and NotI at the 3' end."

BASE COUNT 0 a 14 c 30 g 1 t
ORIGIN

Query Match 1.5%; Score 23.4; DB 9; Length 45;
Best Local Similarity 73.2%; Pred. No. 7.6e+05;
Matches 30; Conservative 0; Mismatches 11; Indels 0; Gaps 0;

```
Qy    1348 GGACAGCGGCGGCGGGGACCGCGGGGGCGGCGGCGGCAGAG 1388
           || | ||||  |||||| |||  |||||||| | ||| | |
Db       3 GGGCGGCGGGTGCGGGGCCCGGCGGGGCGGCCGGGGCGGGG 43
```

```
RESULT 18
AZ335579
LOCUS       AZ335579                 49 bp    DNA     linear   GSS 29-SEP-2000
DEFINITION  1M0065A01R Mouse 10kb plasmid UUGC1M library Mus musculus genomic
            clone UUGC1M0065A01 R, DNA sequence.
ACCESSION   AZ335579
VERSION     AZ335579.1  GI:10404034
KEYWORDS    GSS.
SOURCE      house mouse.
  ORGANISM  Mus musculus
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE   1  (bases 1 to 49)
  AUTHORS   Dunn,D., Aoyagi,A., Barber,M., Beacorn,T., Duval,B., Hamil,C.,
            Islam,H., Longacre,S., Mahmoud,M., Meenen,E., Pedersen,T., Reilly
            ,M., Rose,M., Rose,R., Stokes,R., Tingey,A., von Niederhausern,A.
            and Wright,D.,Weiss,R.
  TITLE     Mouse whole genome scaffolding with paired end reads from 10kb
            plasmid inserts
  JOURNAL   Unpublished (2000)
COMMENT     Contact: Robert B. Weiss
            University of Utah Genome Center
            University of Utah
            Rm. 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., SLC, UT
            84112, USA
            Tel: 801 585 5606
            Fax: 801 585 7177
            Email: ddunn@genetics.utah.edu
            Insert Length: 10000   Std Error: 0.00
            Plate: 0065  row: A  column: 01
            Seq primer: CACACAGGAAACAGCTATGACC
            Class: plasmid ends
            High quality sequence stop: 49.
FEATURES             Location/Qualifiers
     source          1. .49
                     /organism="Mus musculus"
                     /strain="C57BL/6J"
                     /db_xref="taxon:10090"
                     /clone="UUGC1M0065A01"
                     /clone_lib="Mouse 10kb plasmid UUGC1M library"
                     /sex="Male"
                     /lab_host="E. Coli strain XL10-Gold, T1-resistant, F-"
                     /note="Vector: PWD42nv; Purified genomic DNA from M.
                     musculus C57BL/6J (male) was obtained  from the Jackson
                     Laboratory Mouse DNA Resource
                     (http://www.jax.org/resources/documents/dnares/). The DNA
                     was hydrodynamically sheared by repeated passage through a
                     0.005 inch orifice at constant velocity. The sheared DNA
                     was blunt end-repaired with T4 DNA polymerase and T4
                     polynucleotide kinase. Adaptor oligonucleotides were
                     ligated to the blunt ends in high  molar excess. The
                     adaptored DNA was purified and size-selected for a 9.5 to
                     10.5 kb range using preparative agarose gel
                     electrophoresis. Vector DNA was prepared from a derivative
                     of pWD42 (gi|4732114|gb|AF129072.1), a copy-number
                     inducible derivative of plasmid R1. The vector was ligated
                     with adaptors complementary to the insert adaptors and
                     purified. The sheared, adaptored mouse DNA was annealed to
                     adaptored vector DNA, and transformed into
                     chemically-competent E. coli XL10-Gold (Stratagene) cells
                     and selected for ampicillin resistance."
BASE COUNT        0 a      2 c     45 g      2 t
ORIGIN

  Query Match             1.5%;  Score 23.4;  DB 17;  Length 49;
  Best Local Similarity   81.8%;  Pred. No. 7.7e+05;
  Matches   27;  Conservative    0;  Mismatches    6;  Indels    0;  Gaps    0;

Qy    1542 GCCGGGGGGCCGGGGGAGGGGCGCGGGAGGGGG 1574
           ||||||||| ||||| |||| | ||| |||||
Db      14 GCCGGGGGGGGGGGGGGGGGGGGGGGGGGGGG 46
```

```
RESULT 19
BQ577141
LOCUS       BQ577141                 50 bp    mRNA    linear   EST 19-JUN-2002
DEFINITION  PfESToab14e02.y1 Plasmodium falciparum 3D7 asexual cDNA Plasmodium
            falciparum cDNA 5', mRNA sequence.
ACCESSION   BQ577141
VERSION     BQ577141.1  GI:21480458
KEYWORDS    EST.
SOURCE      malaria parasite P. falciparum.
  ORGANISM  Plasmodium falciparum
            Eukaryota; Alveolata; Apicomplexa; Haemosporida; Plasmodium.
REFERENCE   1  (bases 1 to 50)
  AUTHORS   Tang,K., Cole,R., Chakrabarti,D., Haywood,R., Clifton,S., Pape,D.,
            Marra,M., Hillier,L., Martin,J., Wylie,T., Dante,M., Theising,B.,
            Bowers,Y., Gibbons,M., Ritter,E., Bennett,J., Jentes,E., Ronko,I.,
            Tsagareishvili,R., Belaygorod,L., Franklin,C., Carr,L., Grow,A.,
            Maguire,L., Richey,J., Wadkins,J., Kennedy,S., Levinso,D.,
            Waterston,R., Wilson,R. and Sibley,D.
  TITLE     WashU Plasmodium EST Project
  JOURNAL   Unpublished (2001)
COMMENT     Contact: L. David Sibley
            WashU Plasmodium EST Project
            Washington University School of Medicine
            4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108, USA
            Tel: 314 286 1800
            Fax: 314 286 1810
            Email: est@watson.wustl.edu
            Library was constructed by Debopam Chakrabarti DNA sequencing by:
            Washington University Genome Sequencing Center For information on
            obtaining a clone please contact: L. David Sibley
            (sibley@borcim.wustl.edu), Washington University
            Seq primer: -40UP from Gibco.
FEATURES             Location/Qualifiers
     source          1. .50
                     /organism="Plasmodium falciparum"
                     /db_xref="taxon:5833"
                     /clone_lib="Plasmodium falciparum 3D7 asexual cDNA"
                     /lab_host="DH10B (GeneHog, Invitrogen, Inc.)"
                     /note="Vector: pBluescript SK plus; Site_1: EcoRI; Site_2:
                     XhoI; Library was constructed by Debopam Chakrabarti.
                     Total RNA samples were isolated from mixed stage
                     saponin(0.1%)-lysed P. falciparum 3D7 infected
                     erythrocytes by the acidic guanidinium-phenol chloroform
                     method. The poly A+ RNA was isolated by the polyAT-Tract
                     mRNA isolation system (Promega, WI) using streptavidin
                     Magnesphere particles. Directional cDNA libraries were
                     constructed by oligo d(T) priming of poly(A)+ RNA (5mg)
                     into EcoRI and XhoI sites of l ZapII vector using the Zap
                     cDNA synthesis kit (Stragene, CA). The average size of the
                     cDNA inserts in the library was between 1.0 and 1.5kb.
                     Clones were mass excised using the ExAssist helper phage
                     (Stratagene), the phagemids were precitptated with PEG
                     8000 and extracted with phenol/chloroform. Phagemid DNA
                     was electroporated into DH10B cells."
BASE COUNT       24 a      1 c     23 g      2 t
ORIGIN

  Query Match             1.5%;  Score 23.4;  DB 14;  Length 50;
  Best Local Similarity   67.3%;  Pred. No. 7.7e+05;
  Matches   33;  Conservative    0;  Mismatches   16;  Indels    0;  Gaps    0;

Qy      15 GAGGGAGAGAGCGAGCGGGCGAGCCGGAGCGAGGAAGGGAAAGCGCAAG 63
           ||| ||||||| ||| | | |||   ||| |||  || || ||  | ||
Db       1 GAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAACTAG 49


RESULT 20
AV672475/c
LOCUS       AV672475                 44 bp    mRNA    linear   EST 05-OCT-2000
DEFINITION  AV672475 Nori Satoh unpublished cDNA library Ciona intestinalis
            cDNA clone citb5m21 5', mRNA sequence.
ACCESSION   AV672475
VERSION     AV672475.1  GI:10110474
```

```
KEYWORDS    EST.
SOURCE      Ciona intestinalis.
  ORGANISM  Ciona intestinalis
            Eukaryota; Metazoa; Chordata; Urochordata; Ascidiacea; Enterogona;
            Phlebobranchia; Cionidae; Ciona.
REFERENCE   1  (bases 1 to 44)
  AUTHORS   Satoh,N., Satou,Y., Kohara,Y. and Shin-i,T.
  TITLE     Expressed genes in Ciona intestinalis
  JOURNAL   Unpublished (2000)
COMMENT     Contact: Nori Satoh
            Department of Zoology
            Kyoto University
            Sakyo-ku, Kyoto, Kyoto 606-8502, Japan
            Tel: 81-75-753-4081
            Fax: 81-75-705-1113
            Email: satoh@ascidian.zool.kyoto-u.ac.jp.
FEATURES             Location/Qualifiers
     source          1. .44
                     /organism="Ciona intestinalis"
                     /db_xref="taxon:7719"
                     /clone="citb5m21"
                     /clone_lib="Nori Satoh unpublished cDNA library"
                     /tissue_type="whole animal"
                     /dev_stage="tailbud"
                     /note="Vector: pBluescript SK"
BASE COUNT        0 a     22 c      1 g     21 t
ORIGIN

  Query Match             1.5%;  Score 23.2;  DB 10;  Length 44;
  Best Local Similarity   70.5%;  Pred. No. 8.3e+05;
  Matches   31;  Conservative    0;  Mismatches   13;  Indels    0;  Gaps    0;

Qy      15 GAGGGAGAGAGCGAGCGGGCGAGCCGGAGCGAGGAAGGGAAAGC 58
           ||| ||||||| ||| | | |||   ||| |||  || || |||
Db      44 GAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGC 1


RESULT 21
AA977986/c
LOCUS       AA977986                 49 bp    mRNA    linear   EST 26-MAY-1998
DEFINITION  oq55a06.s1 NCI_CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1590226 3'
            similar to TR:O00301 O00301 KSRP. ;contains element MER22
            repetitive element ;, mRNA sequence.
ACCESSION   AA977986
VERSION     AA977986.1  GI:3155432
KEYWORDS    EST.
SOURCE      human.
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 49)
  AUTHORS   NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
  TITLE     National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
            Tumor Gene Index
  JOURNAL   Unpublished (1997)
COMMENT     Contact: Robert Strausberg, Ph.D.
            Email: cgapbs-r@mail.nih.gov
            Tissue Procurement: Christopher Moskaluk, M.D., Ph.D., Michael R.
            Emmert-Buck, M.D., Ph.D.
             cDNA Library Preparation: M. Bento Soares, Ph.D.
             cDNA Library Arrayed by: Greg Lennon, Ph.D.
             DNA Sequencing by: Washington University Genome Sequencing Center
             Clone distribution: NCI-CGAP clone distribution information can be
            found through the I.M.A.G.E. Consortium/LLNL at:
            www-bio.llnl.gov/bbrp/image/image.html

            Trace considered overall poor quality
            Seq primer: -40m13 fwd. ET from Amersham
            High quality sequence stop: 1.
FEATURES             Location/Qualifiers
     source          1. .49
                     /organism="Homo sapiens"
                     /db_xref="taxon:9606"
                     /clone="IMAGE:1590226"
                     /clone_lib="NCI_CGAP_Kid5"
                     /tissue_type="2 pooled tumors (clear cell type)"
                     /lab_host="DH10B"
                     /note="Organ: kidney; Vector: pT7T3D-Pac (Pharmacia) with
                     a modified polylinker; Site_1: Not I; Site_2: Eco RI; 1st
                     strand cDNA was primed with a Not I - oligo(dT) primer [5'
                     AACTGGAAGAATTCGCGGCCGCAATATTTTTTTTTTTTTTTTT 3'],
                     double-stranded cDNA was ligated to Eco RI adaptors
                     (Pharmacia), digested with Not I and cloned into the Not I
                     and Eco RI sites of the modified pT7T3 vector. Library
                     went through one round of normalization. Library
                     constructed by Bento Soares and M. Fatima Bonaldo.  "
BASE COUNT        0 a     24 c     18 g      7 t
ORIGIN

  Query Match             1.4%;  Score 22.6;  DB 9;  Length 49;
  Best Local Similarity   68.9%;  Pred. No. 1.1e+06;
  Matches   31;  Conservative    0;  Mismatches   14;  Indels    0;  Gaps    0;

Qy    1339 CCGCGGCGGGGACAGCGGCGGCGGGGACCGCGGGGGCGGCGGCGG 1383
           ||| || |||||||| | || |||| | ||   |||| | || |
Db      47 CCGGGGGGGGGACAGGGCCGCCGGGAAACGGCCGGGCACCCGCCG 3


RESULT 22
AU103717/c
LOCUS       AU103717                 50 bp    mRNA    linear   EST 30-AUG-2001
DEFINITION  AU103717 Sugano Homo sapiens cDNA library Homo sapiens cDNA clone
            HEP05140, mRNA sequence.
ACCESSION   AU103717
VERSION     AU103717.1  GI:13553238
KEYWORDS    EST.
SOURCE      human.
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 50)
  AUTHORS   Suzuki,Y., Taira,H., Tsunoda,T., Mizushima-Sugano,J., Sese,J., Hata
            ,H., Ota,T., Isogai,T., Tanaka,T., Morishita,S., Okubo,K., Sakaki
            ,Y., Nakamura,Y., Suyama,A. and Sugano,S.
  TITLE     Diverse transcriptional initiation revealed by fine, large-scale
            mapping of mRNA start sites
  JOURNAL   EMBO Rep. 2 (5), 388-393 (2001)
  MEDLINE   21270072
COMMENT     Contact: Yutaka Suzuki
            Department of Virology
            Institute of Medical Science, University of Tokyo
            4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
            Email: ysuzuki@ims.u-tokyo.ac.jp
            Suzuki,Y., Yoshitomo-Nakagawa,K., Maruyama,K., Suyama,A. and Sugano
            ,S. Construction and characterization of a full length-enriched and
            a 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).
FEATURES             Location/Qualifiers
     source          1. .50
                     /organism="Homo sapiens"
                     /db_xref="taxon:9606"
                     /clone="HEP05140"
                     /clone_lib="Sugano Homo sapiens cDNA library"
                     /note="Differential display comparison of untreated and
                     dimethylfumarate treated U937 cells"
BASE COUNT        7 a     20 c     16 g      7 t
ORIGIN

  Query Match             1.4%;  Score 22.6;  DB 9;  Length 50;
  Best Local Similarity   86.2%;  Pred. No. 1.1e+06;
  Matches   25;  Conservative    0;  Mismatches    4;  Indels    0;  Gaps    0;

Qy    1343 GGCGGGGACAGCGGCGGCGGGGACCGCGG 1371
           ||||| |||||||||||| |||  |||||
Db      37 GGCGGCGACAGCGGCGGCTGGGCTCGCGG 9
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```
RESULT 23
BG078033
LOCUS       BG078033                 50 bp    mRNA    linear   EST 26-JAN-2001
DEFINITION  H3022G12-5 NIA Mouse 15K cDNA Clone Set Mus musculus cDNA clone
            H3022G12 5', mRNA sequence.
ACCESSION   BG078033
VERSION     BG078033.1  GI:12560601
KEYWORDS    EST.
SOURCE      house mouse.
  ORGANISM  Mus musculus
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE   1  (bases 1 to 50)
  AUTHORS   Kargul,G.J., Dudekula,D.B., Qian,Y., Lim,M.K., Jaradat,S.A., Tanaka
            ,T.S., Carter,M.G. and Ko,M.S.H.
  TITLE     Verification and initial annotation of NIA mouse 15K cDNA clone set
  JOURNAL   Unpublished (2001)
COMMENT     Other_ESTs: H3022G12-3
            Contact: George J. Kargul
            Laboratory of Genetics
            National Institute on Aging/National Institutes of Health
            333 Cassell Drive, Suite 4000, Baltimore, MD 21224-6820, USA
            Email: cdna@lgsun.grc.nia.nih.gov
            This clone set has been freely distributed to the community. Please
            visit http://lgsun.grc.nia.nih.gov/cDNA/15k.html for details.
            Plate: H3022  row: G  column: 12
            Seq primer: -21M13 Reverse
            High quality sequence stop: 50
            POLYA=No.
FEATURES             Location/Qualifiers
     source          1. .50
                     /organism="Mus musculus"
                     /strain="C57BL/6J"
                     /db_xref="niaEST:H3022G12-5"
                     /db_xref="taxon:10090"
                     /clone="H3022G12"
                     /clone_lib="NIA Mouse 15K cDNA Clone Set"
                     /sex="Clones arrayed from a variety of cDNA libraries"
                     /dev_stage="Clones arrayed from a variety of cDNA
                     libraries"
                     /lab_host="DH10B"
                     /note="Vector: pSPORT1; Site_1: SalI; Site_2: NotI; This
                     clone is among a rearrayed set of 15,247 clones from 11
                     embryo  cDNA libraries (including preimplantation stage
                     embryos from  unfertilized egg to blastocyst, embryonic
                     part of E7.5 embryos,  extraembryonic part of E7.5 embryos
                     , and E12.5 female mesonephros/gonad)  and one newborn
                     ovary cDNA library. Average insert size 1.5 kb. All
                     source libraries are cloned unidirectionally with Oligo(dT
                     )-Not primers.  References include: (1) Genome-wide
                     expression profiling of mid-gestation  placenta and embryo
                     using a 15,000 mouse developmental cDNA microarray,  2000,
                     Proc. Natl. Acad. Sci. U S A, 97: 9127-9132; (2)
                     Large-scale cDNA  analysis reveals phased gene expression
                     patterns during preimplantation  mouse develolpment, 2000,
                     Development, 127: 1737-1749; (3) Genome-wide  mapping of
                     unselected transcripts from extraembryonic tissue of
                     7.5-day  mouse embryos reveals enrichment in the t-complex
                     and under-representation  on the X chromosome, 1998, Hum
                     Mol Genet 7: 1967-1978."
BASE COUNT       18 a      0 c     31 g      1 t
ORIGIN

  Query Match             1.4%;  Score 22.4;  DB 12;  Length 50;
  Best Local Similarity   66.7%;  Pred. No. 1.2e+06;
  Matches   32;  Conservative    0;  Mismatches   16;  Indels    0;  Gaps    0;

Qy      22 AGAGCGAGCGGGCGAGCCGGAGCGAGGAAGGGAAAGCGCAAGAGAGAG 69
           |||| | | ||  |||  |||| |||||||||   | |  || || ||
Db       3 AGAGAGGGAGGAAGAGAGGGAGGGAGGAAGGGGGTGGGAGAGGGAAAG 50


RESULT 24
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BQ807914
LOCUS       BQ807914                 50 bp    mRNA    linear   EST 31-JUL-2002
DEFINITION  NISC_kk11g01.y1 NCI_CGAP_Brn72 Macaca mulatta cDNA clone
            IMAGE:5331264 5', mRNA sequence.
ACCESSION   BQ807914
VERSION     BQ807914.1  GI:22032123
KEYWORDS    EST.
SOURCE      rhesus monkey.
  ORGANISM  Macaca mulatta
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
            Cercopithecinae; Macaca.
REFERENCE   1  (bases 1 to 50)
  AUTHORS   NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
  TITLE     National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
            Tumor Gene Index
  JOURNAL   Unpublished (1997)
COMMENT     Contact: Robert Strausberg, Ph.D.
            Email: cgapbs-r@mail.nih.gov
            cDNA Library Preparation:
             cDNA Library Arrayed by: The I.M.A.G.E. Consortium/LLNL
             DNA Sequencing by: National Institutes of Health Intramural
            Sequencing Center (NISC)
             Clone distribution: NCI-CGAP clone distribution information can be
            found through the I.M.A.G.E. Consortium/LLNL at:
            info@image.llnl.gov
            Plate: LLAM11840  row: N  column: 1
            Seq primer: M13RP1 reverse primer (ABI).
FEATURES             Location/Qualifiers
     source          1. .50
                     /organism="Macaca mulatta"
                     /db_xref="taxon:9544"
                     /clone="IMAGE:5331264"
                     /clone_lib="NCI_CGAP_Brn72"
                     /tissue_type="hypothalamus"
                     /lab_host="DH10B (phage-resistant)"
                     /note="Organ: brain; Vector: pCMV-SPORT6.ccdb; Site_1:
                     NotI; Site_2: EcoRV; Cloned unidirectionally. Primer:
                     Oligo dT. Average insert size 2.2 kb. Constructed by
                     Invitrogen. Note: this is a NCI_CGAP Library."
BASE COUNT       5 a      15 c      30 g       0 t
ORIGIN

  Query Match             1.4%;  Score 22.4;  DB 14;  Length 50;
  Best Local Similarity   66.7%;  Pred. No. 1.2e+06;
  Matches   32;  Conservative    0;  Mismatches   16;  Indels    0;  Gaps    0;

Qy    1328 GCGCGCACGGACCGCGGCGGGGACAGCGGCGGCGGGGACCGCGGGGGC 1375
           |||||| |    |  || ||| ||||| ||| |||    ||||||||
Db       1 GCGCGCGGGCGGAGACGCCGGGGCAGCGCCGGAGGGCGGGGCGGGGGC 48


RESULT 25
BI547391
LOCUS       BI547391                 43 bp    mRNA    linear   EST 05-SEP-2001
DEFINITION  603197282F1 NIH_MGC_95 Homo sapiens cDNA clone IMAGE:5276516 5',
            mRNA sequence.
ACCESSION   BI547391
VERSION     BI547391.1  GI:15434703
KEYWORDS    EST.
SOURCE      human.
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 43)
  AUTHORS   NIH-MGC http://mgc.nci.nih.gov/.
  TITLE     National Institutes of Health, Mammalian Gene Collection (MGC)
  JOURNAL   Unpublished (1999)
COMMENT     Contact: Robert Strausberg, Ph.D.
            Email: cgapbs-r@mail.nih.gov
            Tissue Procurement: Miklos Palkovits, M.D., Ph.D.
             cDNA Library Preparation: Michael J. Brownstein (NHGRI), Shiraki
            Toshiyuki and Piero Carninci (RIKEN)
```

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            cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
            DNA Sequencing by: Incyte Genomics, Inc.
            Clone distribution: MGC clone distribution information can be
           found through the I.M.A.G.E. Consortium/LLNL at:
           http://image.llnl.gov
           Plate: LLAM11698  row: d  column: 21
           High quality sequence stop: 23.
FEATURES             Location/Qualifiers
     source          1. .43
                     /organism="Homo sapiens"
                     /db_xref="taxon:9606"
                     /clone="IMAGE:5276516"
                     /clone_lib="NIH_MGC_95"
                     /tissue_type="hippocampus"
                     /lab_host="DH10B"
                     /note="Organ: brain; Vector: pBluescriptR (modified
                     pBluescript KS+); Site_1: BamHI; Site_2: SalI-XhoI (gtcgag
                     ); Oligo-dT primed using primer 5'-TTTTTTTTTTTTTTTTVN-3',
                     size-selected for  average insert size 2.5 kb and
                     normalized to ROT 5. This is a primary library enriched
                     for  full-length clones and constructed using the
                     Cap-trapper method (Carninci, in preparation).  Library
                     constructed by M. Brownstein (NIMH/NHGRI, National
                     Institutes of Health).  Note: this is a NIH_MGC Library."
BASE COUNT        5 a     12 c     23 g      3 t
ORIGIN

  Query Match             1.4%;  Score 22.2;  DB 13;  Length 43;
  Best Local Similarity   77.1%;  Pred. No. 1.3e+06;
  Matches   27;  Conservative    0;  Mismatches    8;  Indels    0;  Gaps    0;

Qy   1352 AGCGGCGGCGGGGACCGCGGGGGCGGCGGCGGCAG 1386
          ||||| |||||||  |||||| ||  |||||  ||
Db      1 AGCGGAGGCGGGGCGCGCGGGTGCACCGGCGTGAG 35


Search completed: March 13, 2003, 23:58:36
Job time : 2479 secs
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